to Them

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Plane Sailing.

Questions to exercise the learner (Bowditch 58 page)

Question 1st. A Ship in 2°.10' S. lat. Sails N. by E. 89 leagues. What latitude is she in & what dep. has she made?

Course N. by E. distance 89 leagues — Dist 267 miles gives — Lat left 2°.10' S. — Diff of Lat. 4°.22' N — Lat in 2°.12' N

60 / 262 diff of lat. and 2) 52.1 dep.

4°.22' Diff Lat — Dep 17/36/100 leagues

In this case the ship crossed the Equator and is in North latitude. — from 2°.10' she sailed 4°.22' N. balance 2°.12' N

Question 2d. A Ship sails S.S.W. from a Port in 41°.30' North. Then by Observation is in 36°.57' North latitude. What dist has she run & dep. made?

60. S.S.W. Diff of lat. 273' gives a dist of 295.5. and dep 113.1. — Latitude left 41°.30' N. — Latitude by Obs. 36°.57' N. — Dep — 4°.33' — Diff of Lat — 273 miles

& In this case I took the No. below and the One above the diff of lat. added them together and took the half as the distance

Question 3d

A Ship sails S.S.W. ½ W. from 2°.30' S. till her dep. is 59 leagues. What distance has she sailed and what distance has she sailed and what latitude is she in? — 60 S.S.W. ½ W. Dep 59 leagues — 2) 177 miles gives — Lat. left 2°.30' S. — Diff of lat. 5°.31' S.

165.8 Diff of Lat and 188 Distance — Latitude in 8°.01' S

331.6 / 5.31.6/10 — 3) 370 / 125.33/100 Leagues.

When the Numbers are too large to be found in the Tables divide by any convenient Number the less the No. the better

Question 4th

If a Ship sails S.S.W. from a Port in 41°.30' North and till her dep^t is 100 Miles. What is her distance Sailed and Lat in?

Question 4th by Bowdich

If a ship sails 360' South Westward from 21°.59 S latitude till by Observation she is in 24°.49 S. latitude What is her course and departure?

Lat. Left — 21.59 S.
Lat by Obs^n 24.49 S.
2.50
60
170 miles

Dist 360
2
180

Diff of Lat 170
2
85 Thus

No. gives a Course of 62° & dep 158.9 W.

Departure 317.8

Question 5th

Suppose a Ship sails 354' North Easterly from 2°.09 South latitude until her departure is 150 miles. What latitude has she arrived in & what course did she steer

Dist 354' Dept 150
177 75 Thus No gives a Course of N. 25 E. and diff of latitude of 160.4

Lat Left 2.09 S.
Lat. Made 5.21 N.
Lat. in 3.12 N.

160.4
2
6,0 | 32.0.8
5.20.8/10

The ship in this case crossed the equator and arrived in a latitude of a different name having sailed North 25°. East from 2°.09 S. and 3°.12' Miles north of the Equator

Question 6th. Sailing between the North and West from a port in 1°.59' South lat and then arriving in an other in 4.08 N. latitude which is 209 Miles West of the first port What course did she steer and what was the distance run?

Dep. 209. Diff of Lat 367.
104.5 183.5

These No. give a Co. of N. 30° W. nearly & 211 dist thus Mult. by 2 is 422 the dist

Lat left 1st p. 1°.59' S
Lat 2d port 4.08 N.
6.07
Diff Lat .. 367.

Question 7th. Four days ago we were in lat 3°.25 S and have sailed due N.W. by No. at the rate of 8 Miles P. hour. I demand the latitude in & dep. from the Pur?

Four days is 96 hours & 8 knots gives 768 Miles

Lat Left 3.25 S. Co. N.W. by W. dist 768
Diff of Lat. 10.38 N. 192 thus course
Lat in 7.13.4/10. N. & 1/4 dist 192 gives 159.6 diff of Latitude
and 106.7 dep.
Dep 426.8 — 638.4 / 60 = 10°.38' Diff of Lat.

In this case as the distance was such as to loose no fraction by dividing it by 4 we obtain the diff. of latitude & departure almost exact —

The Latitude by Log. is 7°.14 N.
By the Tables of diff of Lat or 7.13 4/10 N
varying only 1/10th from the
Answer by Logarithms

5

Parallel Sailing

Question for exercise

Question 1st. A Ship in latitude 32°.00' North sails due East till her departure is 325.6/10th miles What is her difference of longitude?

With the Co. 32°. and dep. 325.6/10 being too large to be found in the Tables I take the 1/2 = 162.8 This found in the latitude Col. and opposite in the dist Col. stands 192 This Multiplied by 2 is 384 or 6°.24'

Answer 6°.24' dif. Long

Question 1st. from Bowdich. the reverse of the above A Ship in the lat of 32°.00' sails due East till her difference of longitude is 384 miles. What dist did she sail?

Course 32°. Diff. of Long 384' half is 192 This found in the dist. Col. under 32°. Opposite in the latitude Col. stands 162.8 Multiplied by 2 is 325.6/10 the distance sailed. and Answer 325.6/10 Miles

Question 2d. A Ship from lat 53°.36' S. ~~sails due~~ longitude 10°.18' East sails due West 236 Miles. What long. has she arrived in

As the lat is 53°.36'. I use as a course

53 — half the dep 118 gives 196
54. — gives 201

10 | 39.7
6°.37' West.

Long. left 10°.18' East
Diff of Long 6°.37' West
Longitude in 3°.41' East

Question 3d

If 2 Ships in the latitude of 44°.30 North distant 216 Miles should sail directly South until they arrived in the latitude of 32° N What distance will they then be from each other

Sol. First take the distance they are apart in latitude 44°.30' and turn it into ~~dep~~ longitude by using 44°. and 45° as a course Then take the longitude thus found (in 44° & 45°) down into the latitude of 32°. And turn the longitude into departure or distance which is the same. being due East & West from each other —

Thus { In lat. 44 and p dist 108 — gives 150
In lat 45 do do 108 do 153

As I use but half the dist, the sum is diff of Long 303 = half is 151.5

Then take half the diff of long 151.5 and 32°. as a course and find the nearest corresponding number in the distance column opposite in the lat Col. stand 128.1 This multiplied by 2 gives the answer 256.2

Question 4th

A Ship having run due East for 3 days at the rate of 5 knots an hour finds she has altered her longitude 8°.16' What parallel of latitude did she sail in?

She altered her long 8°.16' — In 3 days or 72 hours by sailing 5 p hour $\frac{5}{360}$ dist sailed

Long made $\frac{60}{2}$ 496 — $\frac{2}{180}$

½ Long 248 ½ Dist

With 248 (½ the long) found in the dist Col. and 180 (½ the dist sailed) in the lat Col. are found to agree nearest under a course of 40° & 41°

Therefore the Course or Parallel of latitude the Ship sailed in was 40°.30' either North or South

Middle Latitude Sailing.

Questions for Excercise.

Question 1st What is the bearing and distance between two places. One in the latitude of 37°.55' N and long. 54.23' West. The other in lat of 32°.38' North and longitude of 17°.05' West?

Lat. of the 1st Port 37°.55' N. — Long 54°.23' W. — Lat 37.55 N
Lat. of 2d do 32.38 N. 2d Long 17.05 W. 2d 32.38 N

5.17 — 37.18 — Sum 70.33

Difference of Lat - 317. miles. — Diff Long 2238 — Midd. 35.16

With the Middle lat 35° (the nearest degree) I turn the diff of longitude into departure. Thus first I divide the difference of longitude by 10. 2238 this I use as 224 as it wants but 2/10 of that No. I enter Table 2d and under 35°. the Mid lat. and opposite 224 in the dist col. stands 183.5 in the lat col. this is 1/10 of the dep then With 1/10 the dep of lat 31.7. and 1/10 the dep 183.5 I go to the Table again and find those No.s to agree nearest over a course of 80° — and opposite the distance of 186'.
This multiplied by 10 is — 1860 the dist

Course 80° East or West as the case may be
And the Distance 1860 miles

Differing 6 Miles from the Ans. by Logar. owing to the use of 2/10th more than the longitude actually was which should have been calculated in the departure or at the close of the work

Question 2d. What is the direct course and distance from a place in latitude of 36°. 55' S. and longitude of 20° East. To an other Port in the lat of 32. 38 S. and longitude of 8°. 54' West?

Lat. of 1st Port	36°. 55' S.	Long	20°. 00' E.	1 Lat	36°. 55' S.
Ditto 2d Port	32.38 S.	do.	8. 54 W.	2d Do	32.38 S.
	4.17		28.00		69°.33
Dif of Lat.	10 257	dif Long	10 1734 -	Med Lat	34°.46'

Then with the Med. Lat as a course 35° (marsh degree) and 1/10th the diff of long. 173.4/10 (inches is 173) found in the dist col. under 35° - Opposite in the lat col. stands 142 the departure

Then with 1/10 Dif of Lat 25.7. and 1/10 Dep. 142' I find the Course to be from the 1st to the 2d Port S. 80°. W. and the distance 145 Miles. Multip. by 10 = 1450 miles dist.

Question 3d. A Ship from latitude 37°. 36' South Long 60° East Sails North 79°. 56' West 202 miles What latitude & longitude is she in?

As the Course is North 79°. 56' - I use 80° as the course and the dist 202 gives 198.9 Dep and 35.1 diff of lat

Latitude left 37°. 36' S.
Lat. made 35 N.
Lat in . . 36°. 55' S.
Sum of lat. 74.25
Middle lat. 37.12

With the Mid lat 37°. as a course and the dep. 198.9 found in the lat col. Opposite in the dist col. stands 249 the dif of Long

Longitude left 60°. 00 East
Diff of Long. 249' is 4.09 West
And the longitude in 55.51 East

Question 4th. A Ship from the latitude of 34°.35' N. and long. 45°.16' W. sails South 83°.36' East 101 Miles. What lat & long. is she in?

As the course is so near 84°. I use that as a Course

Co. S. 84°. E. dist 101. gives 100.5 dep. and 11 diff Lat.

Lat. left	34.35 N.	As the Middle lat. is 34°.29'
Diff of Lat.	11. S.	I use 34° and 35° as a course
Lat. in	34.24 N.	34° & 100.5 Dep. gives 121
Sum of Lat	68.59	35 . do do do 123
Middle Lat	34.29.	244 ÷ 122 = 2°.2'

This 2°.02' thus found I subtract from the long. left and I have the longitude in.

Long left . . .	45°.16 W
Long made . . .	2.02 E.
Long in . .	43°.14 W

Question 5th. A Ship from lat 49°.57' N and longitude 15°.15' W. sails South-Westerly till her departure is 789 miles and lat in 39°.20' North What was her course, dist. sailed & lat. & longitude in?

Lat. left .	49°.57' N
Lat. in	39.20 N
Diff of lat.	10.37
diff of Lat.	637 miles (60)

With the diff of lat 637. & Dep 789 or 1/10 of them 63.7 and dep 78.9. I find the Course to be S. 51°. W. and dist 101.5 & Multip. by 10.15 Miles Distance

Lat. left.	49°.57' N.
Lat arrived in	39.20 N.
Sum . .	89.17
Mid. Lat.	44.38

With the Middle Lat 44°.38' I take 44°. & 45° as a Course

44° & 1/10 Dep 78.9 gives 110
45 do do do 112
222 ÷ 2 is 111

Multiplied by 10 is 1110 Miles divided by 60°. is 18°.30' W.

Longitude sailed from	15.10 W.
Longitude in	33°.40' W.

Question 6th. A Ship in the lat of 42° 30' N. Long. 58°. 51' W. Sails S. E. by S. 591 Miles; What is her latitude & longitude in?

Course S. E. by S. Dist 591 half is 295.5 gives us 245.3 diff of lat and 163.9 dep

10) 490.6
8. 1. 6/10

Then find the Mid Lat

Lat left 42. 30 N
Diff of lat. 8. 11 S
Lat in 34. 19 N
Sum of lat. 76. 49
Middle Lat 38. 24.5

With the Middle lat as a course and 1/2 half the dep I go to the Table and use 38° & 39 - 38°. and 163.9 dep gives me 208. and 39° & 163.9 gives 211. Sum 208 211 419 / 6.59 E.

Longitude Sailed from 58. 51' W.
Diff of Longitude 6.59 E.
Longitude in . . . . 51. 52 W.

Question 7th Suppose a ship sailing from a place in latitude 49. 57' N., and Longitude of 30. 00. W., Makes a course good of S. 39°. W. and then by observation, is in latitude of 45°. 31' North What dist. did she run. and what long, is she in?

Lat. left — 49°. 57' N.
Lat. in by Obs. 45. 31 N.
Diff of lat. 4. 26 —
diff of lat. . 266 Miles.

Co. S. 39° W. diff of lat. 266. half is 133 gives 171 dist & 107.6 dep
Distance 342

Then with the Middle lat for 47. 44. I use 48° as a course and find 107.6 in the latitude column and opposite in the dist Col. Stands 161 this multip by 2 gives 322 = to 5°. 22' The diff. of ~~latit~~ Longitude

Longitude left 30°. 00. W.
Diff of long 5. 22 W.
Longitude in 35. 22 W.

Question 8th. A ship in latitude 50°.00' S. and longitude 30° East sails E.S.E. till her dep. was 95.7: What latitude and longitude is she arrived in?

Course E.S.E. Dep 95.7. or 1/10 95.7 gives us

104 dist and 39.5 diff of lat.
10
Dist. 1040 Miles

10) 39.5
6°.35 - diff of lat

Lat left 50°.10 S.
6.35 S.
56.45 S.
Sum of 106.55
Mid Lat 53.27 S.

As the Mid. lat is 53.27 S/10 I use 53 & 54°
Over 53° and 1/10 dep 95.7 gives ... 159
... 54 do do do 163
1/2 322.
161. Mult by 10 is 1610 = 26.50 dif Long

Longitude Sailed from 30°.00' East
Difference of Long made 26.50 East
Longitude in .... 56.50 East

Question 9th. A ship in the lat. of 49°.30' N, and Longitude of 25° W. sails South-Easterly 645 Miles until she had made 500 Miles departure. Required the course steered, latitude and longitude in?

Distance Sailed 645. Dep. made 500
Divide by 5 129 1/5 Dep 100 These No.
correspond to a course of S. 51° E. and 81.2 diff of Lat

Lat. left 49°.30' N.
diff of lat. 6.46 S.
Lat in 42°.44' N.
Sum of Lat. 92.14
Mid Lat. 46.07

106.0 = 6.46 S.

With Mid Lat. 46°. as a course & and 1/5th the dep 100 found in the lat col. over 46° in Table 2d Stands 144 in the dist col. this mult by 5 is 720 divided by 60 12° Dif of Long E.

Longitude Sailed from 25°.00' W.
Diff of Longitude made 12.00 E.
Longitude in . . . 13.00 W.

differing only one mile from the Ans. by Logs

Mercators Sailing.

Questions for Exercise.

Question 1st. A Ship in latitude 49°. 57' N. and longitude 15°. 16' West sails South-Westerly until her departure is 789 miles and then by observation is in 39°. 20' N. What course did she steer and what did she sail & what longitude is she in?

Lat. left 49°. 57' Meridional Parts 3470+ Dep.e 789

Lat. in 39. 20 Do Do 2571

10°. 37' = 637 Miles 899 Medi.e dif. Lat

With 1/10th the Mid dif. of Lat. 63.7 & 1/10 dep. 78.9

I find the course to be S. 51° W. and dist 101.5.

Multiplied by 10 gives the dist. 1015 Miles

Then with this course 51° I look for 1/10th the Meridional diff of Lat 89.9. Nearest 90. found in the lat. col. is 90 - Opposite this in the departure Col. stands 111.1. This Multiplied by 10 gives 1111' - divided by 60 is 18°. 31' W. This add to the longitude left - 15. 16 W.

and we have the longitude in 33°. 47' West

Course S. 51° West Dist 1.015 Miles

Longitude in 33°. 47' West

Question 2d. A Ship in latitude 42°.30' N. and longitude 58°.51' West sails S.W. by S. 591' What latitude and longitude is she in?

Course S.W. by S. Dist. 591'

With this Course and ... 295.5 Enter the Table 1st and by dividing the difference of lat. & dep. Equally between what is given to 295 & 296 distance I find the diff of lat to be 245.5 and dep. 164 –

Lat. left 42°.30 N. M.P. 2822 } 60) 491.0 = 8°.11'.5 Diff. of Lat.
Diff of Lat 8 11. S.
Lat in 34.19 N. M.P. 2194 }

Meridional diff of Lat. 628 Then with 1/10th the Merd. diff. of Lat 62.8 I go to Table 1st and under the Course of S.W. by S. and opposite 62.8 in the lat col. in the departure col. opposite stands 41.7 – To this I add 3/10 and call it 42' on acct of loss of fractions in the Table

Diff. $\frac{10}{420'}$ = 7° long W. This added to long. left is Long in 65°.51' W.

Quest 3d A ship from lat 49°.57' N. and Long. 30°. W. sails S.39°.W. till she arrives in Lat. 45°.31' N. What is her dist & long in

Lat left 49°.57' Merd Parts 3470 } With 1/2 diff of Lat 133 and
Lat in 45.31 do do 3074 } under the course 39° I find
4.26 = 266' 1/396 – } opposite to 132.9 stands 171.2 dist
Half diff of Lat 133. } M.D. 198 } and 107.6 dep. } 342 Dist

Then with the Course 39°. & Meridional diff of Lat 198 I find the diff of Long. Thus under 39°. I look for 1/2 the Merd. diff. of lat 198. in the lat col. stands 161.2 in the dep col. this multiplied by 2 – is ... 322' or 5°.22' The difference of longitude made W.

Longitude sailed from 30°.00' W.
Difference of Longitude .. 5°.22 W.
Longitude in ... 35°.22 W.

And the Distance sailed 342 Miles

Question 4th A Ship from lat. 50°.16' S. and long. 30°.00 E. Sails E.S.E. till her dep. is 957 Miles What dist did she sail, and what lat. & long. is she in?

Course E.S.E. Dep 957 or 1/10th - 95.7 - gives 103.5 dist. & 39.6 diff of Lat.

Lat. left 50°.16' S. Merd. Parts 3490 } Dist 1035 Dif Lat 39.6 = 6°.36

Dif of Lat 6.36 S.

Lat. in 56.46 S. Merd Parts 4157

Meridional diff of Lat. 667 } With 1/10 the Merid. dif of lat 66.7 I enter Table 2d and over the course of E.S.E. or 6 points and find the nearest corresponding No. in the lat Col. is 66.6 and opposite in the dep. Col. stands 160.8 this multip. by is 1608' = 26°.48' The difference of longitude

This add to the long left — Longitude left. 30°.00 E.

Latitude in 56°.46' S. — Longitude made 26.48 E.

Distance 1035 Miles — Longitude in 56°.48 E.

Question 5th A Ship in lat. 49°.30 N. & long. 25°.00 W. Sails south Eastwd 645' till she made 500' dep. What course did she steer and what lat. & long. has she arrived in?

With 1/5th the dist 129.0 & 1/5 the dep 100 agree nearly to a Course of 51° - and a difference of lat. of 81.5 Mult. by 5 = 405' = 6°.45' S.

Lat left 49°.30 N. Mer. Pts. 3128

Dif of Lat 6.45 S.

Lat in 42.44 N do 2837

Merd dif of Lat 589 = dif by 5. 117.45 or 8/10

I enter the Tables again with the meridional diff of Lat or 1/5 - 117. and 8/10 And over the Course 51° - I find in the Lat Col. 117.7 the nearest No and in the dep Col. opposite stands 145.3 x by 10 = 726.5 = 12°.06' E.

Longitude left 25°.00 W. } Course S. 51° E

Diff. of Long. 12.06 E. } Lat. in 42°.47' S.

Longitude in 12°.54 W.

The longitude differs 3 miles on acct of the Course differing a little from that by Log.

16

To find the Declination at any time under any Meridian

Example 1st Required the Sun's declination at the end of Sea day Oct 10th 1848 in longitude 130° E. from Gren.

Suns Decl. Oct 10th at the end of Sea day by Table 4 is 6°.46 S

Variation of Decl. Oct 10th 130° E from Greenwich — 8

True decl. at Noon in 130° East . . . 6°.38 S

Example 2d What was the Sun's declination Oct 10 1848 Sea acct at 8h.21m A.M. in long. 130 E. from Greenwich

Sun's dec. at noon as found above was — 6°.38 S

Variation of declination for 3h.39m from Noon Subt. 3

True dec. Oct 10th 48, in long. 130 E. @ 8h.21m A.M. 6°.35 S.

In this case the declination was taken out for Noon at the end of "Sea day" and as the dec. was increasing, it was less at 8h.21. therefore all the dec. increased in 3h.39m must be subtracted as it was that time before noon.

Example 3d What was the Sun's dec. May 10th 1848 Sea acct at 5h.30m P.M. in longitude 35°.45' East?

Variation for 35.45° East longitude — 1.38" Subt.

Variation of dec in 5h.30m P.M. add. 3.44

The difference is additive . . . 2.06 — 2.06

May 10th is 9th by N.A. the Suns dec. was . . 17°.26.27

True dec. May 10th 5h.30m P.M. Sea Acct Long 35.45 E. 17°.28.33 N.

1057

Question 4th. New Bedford Oct. 2d. 1857.

What was the sun's dec. March 26th. 1848 Sea. acct at 3 O'clock P.M. in longitude 140° West from Greenwich?

Variation March 26th. in long. 140° W. add	9'.08"
Ditto in 3 hours P.M increasing add	2.56
March 26th. Sea Acct is by N.A. March 25th. at this time the Sun's declination was	1.56.41 N.
True dec. March 26th. at 3 P.M. in 140° East	2°.08.45" N.

As the declination was increasing and the longitude West it is evident that declination increased from the time the sun passed the meridian of Greenwich until she arrived at the place of observation in 140° West of Greenwich therefore the declination of 9'.08" must be added as the sun's declination was taken out for noon at Greenwich.

And as it was 3 hours P.M. and declination taken for the nearest noon. and the declination increasing 3 hours (from noon to 3 PM) this also must be added to the declination at noon as above worked.

To find the Time at Sea and Regulate a Watch by the Sun's Altitude

Question 1st In latitude 36°. 39'. S. Sun's Dec.n 9°. 27'. N. The Altitude of the Sun's lower limb in the Morning was Observed to be 10°. 33' A. What was the Apparent time?

Sun's Alt.	10°. 40'		
Latitude	36. 39	Sec.t	0. 09566
Polar dist	99. 27	Cosec.t	0. 00593
Sum	146. 46		
Half Sum	73. 23	Cosine	9. 45632
Sun's Alt.	10. 40		
Remainder	62. 43	Sine	9. 94878
Nearest log Sine found		Sine	19. 50669
9. 75331 giving	7h. 23m. 52s	Sine	9. 75334

Observed Alt. 10°. 33'
Semidiameter & dip 12
Refraction Sub.t 10. 45
5
Correct alt. 10. 40

Polar Distance
Radius 90°. 00
Declination add 9. 27 N
Polar dist 99. 27

and the diff. 3 by Table a. gives 1. this subtracted gives 7h. 23m. 51s Subt.
because an increase of the log diminishes the time

Question 2d In lat 36°. 21'. S Sun's Dec.n 8°. 44'. N. Alt of the Sun's L.L. in the Morning 10°. 48' A. What is the Appt time?

Sun's alt.	10. 55		
Latitude	36. 21	Secant	0. 09398
Polar dist	98. 44	Cosec.t	0. 00506
Sum	146. 00		
Half Sum	73. 00	Cosine	9. 46594
Sun's Alt	10. 55		
Remainder	62. 05	Sine	9. 94627
		1/2	19. 51125

Sun's alt. 10°. 48'
12
11. 00
5
Corr.d Alt. 10°. 55'

Radius 90°. 00
Sun's Dec.n 8. 44
Polar dist. 98. 44

Sine of this 9. 75562 – The nearest logar.m found is 9. 75569 giving 7h. 22m. 8s and the diff. 7 by Table a. Gives 3 – To add.

Answer 7h. 22m. 11s

Question 3d. Lat 29°.25 N. – Sun's dec. 23°.20 S.
Obs. alt Sun's L.L. – P.M. What is the App. time?

Sun's Alt	15.07		
Latitude	29.25	Sec	0.05995
Polar dist	66.40	Cosec	0.03706
Sum	111.12		
1/2 Sum	55.36	Cosine	9.75202
Sun's Alt.	15.07		
Remainder	40.29	Sine	9.81240
			19.66143
		Sine	9.83071

Obs. Alt 14.58
App. Sun's 12
Refraction 15.10
Sun's Alt 15.07

Polar Distance
The lat. & declination are both North therefore Subtract the decl. from 90° and we have 66.40

Nearest No. found in the Table is 9.83078 This gives us 5h. 41m. 4s diff. of log. 7 by A. 7 gives 4 Thus Subtract
5h. 41m. 0 – The answer.

Question 4th. Lat. 3°.31 S. Sun's Alt. L.L. 38°.41
Declination 20°.03 S. What is the App. time?

Sun's Alt	38°.52		
Latitude	3.31	Sec	0.00082
Polar Dist	69.57	Cosec	0.02715
Sum	112.20		
1/2 Sum	56.10	Cosine	9.74568
Sun's Alt.	38.52		
Remainder	17.18	Sine	9.47330
		Sum	19.24695
		Sine of 1/2 Sum	9.62347

Obs. Alt 38°.41
Semidiam ☉ 12
Refraction 38.53
Co. Alt 38.52
90°
Sub. 20.03 S
69.57

The nearest log Sine found 9.62350 – This gives 3.18.48
Diff of Logs 3 by A. – gives 1
Answer 3.18.47

Question 5th. Lat. 13°.17' N. Decl. 22°.10' S. Sun's altitude
L.L. 36°.26'. What is the apparent time of Observation?

Sun's Alt	36°.37'		
Latitude	13.17	Sec.	0.01178
Polar dist	112.10	Cosec.	0.03335
Sum	162.04		
½ Sum	81.02	Cosine	9.19273
Sun's Alt	36.37		
Remainder	44.25	Sine	9.84502
			19.08288
			9.54144

Obs.d Alt.	36.26
	12
	36.38
Refraction	1
Correct. alt	36.37
	90°.00
Sun's dec.n	22.10
Polar dist.	122°.10'

The nearest log. sine found is 9.54161 — giving 9.h 17.m 4.s
difference 17. this diff. by Table A. gives . . . 4 to be add.
and we have the apparent time of Obs.n. 9.17.8 the Answer

Question 6th. Lat. 21°.36' S. Sun's dec.n 3°.37' S. O.M.
The Obs.d Alt of Sun's ☉☾ 35°.48'. What is the App.t time?

S.s Altitude	35°.59'		
Latitude	21.36	Sec.	0.03662
Polar dist	86.23	Cosec.	0.00087
Sum	143.58		
½ Sum	71.59	Cosine	9.49037
Sun's Alt	35.59		
Remainder	36.00	Sine	9.76924
			19.29208
			9.64604

Obs.d alt ☉☾	35°.48'
	12
	36.00
	1
	35.59
	90°.00
Sun's Dec.n	3.37 S.
Polar dist	86°.23'

The nearest log sine found in the Table is 9.64596 giving 8.h 29.m 52.s
By Table A the difference . . 8 gives . . . 2 Subt.
This 2 is subtractive because the larger the log. the less the time and the log sought is 8 more than log. found for which you took the time 8.h 29.m 52.s sub. the 2 and we have the App.t time as above 8.h 29.m 50.s Ans. 8.h 29.m 50.s

To find the time of the Moon's passing the Meridan of any place (mean time

At what time did the ☽ pass the Miridean of 80° W. longitude on the 27th. of June 1836 Sea account — Mean time?

June 27th. Sea Acct is by N.A. That day the ☽ passed the Meridian of Greenwich (a the . . . 9h. 55m. 9/10s

And on the following day (June 27) . (a . . 10. 59. 8/10

Daily Difference of her passages . . . 1h. 03m. 9/10s

As the daily difference lacks only 1/10 of 64m I go to Table 28th page 230 and opposite the long: 80°.W. and under 64m of Variation Stand 14m — this add to the time first taken out — 9h. 55m. 9

Variation 14 — add — 14. 0

Also add for Long. 80 W. in time 5. 20. 00

And we have the time of the Moon's passing the Merid of 80°W on the the 26th. day of June — 26d. 15h. 30m. 00

In this case 9/10 is called 1m.

To find the ☽'s declination 26d. 15h. 30m —

By the N.A. the ☽'s Declination June 26d. 15h. was 23°. 37'. 43". 2

And the variation of dec. in 10m was 87" — 9.8/100 — 4. 23. 9

To find the decn. for 30m — I say if 10 gives 87.98 what will 30 give — 23°. 42'. 07". 1

Divid by — 10 | 263.9 40 — ☽'s Declination

do — 100 | 26.3.

do — 60

Thus I use as 4h. 23m. 9/10s as above — 4. 23. 94/100.

To find ☽'s Horizontal Parallax

June 26d. 12h. By N.A. Midnight Hor. Par. was 60. 53". 8.

27 — Dito Noon. Dito 61. 07. 4

Diff. in 12 hours from Midnight to Noon . . 13. 6

We have found the H.P. for the 26d. 12 and now have to find it for 3h. 30 more. Thus { If 12h. gives 13". 6 What will 3h. 30m give

720 | 60 — 210 — 1300 — 2720 — 2856 — 246 — 696 — 648 — 480/720 — 3. 9/10 — 3h. 30m gives — 3". 9 45/72

26d. 12h — gives 60. 53. 8

Thus I call 60. 58" Hor. Par. — 60°. 57'. 7 45/72

By the above I find the ☽ pass the Merid of the obs June 26d. 15h. 30m —

And her declination at that time was 23°. 42'. 07". 1

And her Horizontal Par. 60°. 58". Augm. by 5. 15. 10 — 60. 48"

To find the Latitude by the Meridian Altitude of the Moon.

Suppose. On the 27th of June Sea Alt in Long. 80° W. of Greenwich the Meridian Altitude of the ☽ was Observed to be 40.00° (Upper limb) and bearing South the eye of the Observer being 19 feet above the surface of the sea. What is the Latitude

☽'s Observed altitude Upper limb on the Meridian		40°.00'.00"
As the Upper limb was obs'd subtract the Semidiameter		#. 16.48"
Table 43rd For dip of the horizon being 19 feet above the surface of the sea		39°.43'.12"
		4.17
☽'s Apparent Altitude		39.38.56
✱ — Correction Table 19th (Tabular No. 59.42" = Subt Cor. 13.52" and we have)		45.50
The ☽'s Central alt sub^c from 90°.00.00"	Central alt 40°.24.45	
40.24.45		
is the Zenith distance 49.35.15 — Zenith dist		49.35.15 N
☽'s Declination as found on the opposite page		23.42.07 N
Latitude in		25.53.07 N

✱ To find the Correction above Marked thus ✱ - With the Hor. Par. as found on the opposite page 60.58" and ☽'s app'd Alt 39°.38.55" Enter T. 19th - page 118 And under 60' of Par^x at the top & opposite 39°.30' ☽'s alt Stands - 13.46
Run for the remaing 8.55". I use 9^m - and by T. 9 gives 5 — 5
Run for 58" Par^x I go to Table A and opposite 58^s at the side & under 8 at the top stands 1. This also add and we have 1
This subtracted from the regular Tabular No. 59.42 — 13.52"
And we have the Correction Table 19th marked thus ✱ above 59.42
45.50

To find Moon's Semidiameter

	26^d. 15^h.30^m	
☽'s Semidiameter @ Midnight 26^d	16.35.7/10	
The following — Noon 27th —	16.39.4	
Diff in 12 hours	3.7	
By Table 18th 4 — gives —	1	This added
To —	16.35.7	
	16.36.7	
Augt by T. 15 for Alt 40 is —	10	
	16.46.7 or 16.47"	

Notes to assist in working the lunar on the opposite page. First Sea Acct Jan.y 7th (a 11.57 past midnight is by N.A. Jan.y 6d 12h 11m 57s - Nautical Acct begins one day or 24h. less than sea acct. commencing where sea day ends and runs from 1 to 24 hours, as this days obs.n was taken 11m 57s. after midnight on the 6th by N.A. - which comm'd the noon previous it was 12 hours to Midnight & 11.57 past. Therefore it was 6d 12h 11m 57s. See opposite work. Then to turn the longitude into time (see T.21) which needs no explan but, to be sure you are right, multiply the longitude by 4 & divide the sum by 60 and you have the time, reverse the position & you have the gross. The Semidiameter & Horizontal Parallax. are found in the I & II pages of the N.A & Corr by Table 11th. - L.L. lower limb. U.L. upper limb. N.L. nearest limb. F.L. farthest limb. In this case the F.L was taken in the measuring of the distance from the Star. Therefore the Semidiameter must be subtract from the dist of the ☾ & ☉ to obtain the central dist. - 33' opposite Table 17th. as the star has so little parallax, no acct is made of it (See page 89 of the Tables) Oppos.e 32° - nearest degree of ☾'s Alt Stands 58.29" in Col. Marked "corr" And in Col. Marked "log" Stands 1.7018 (see Col. 1st & 3d opposite Table 19th. With ☉'s app.d Alt 34°.55' And Hor. Par.x 55.24" (See page 115) I enter the Table and opposite 34°.50' in the side Col. Marked "app. alt." & under Hor. Par.x at top Stands 15.5. Then for the remaining 5 of Altitude I go T.B. Same page and nearly opposite - Stands 5. this gives 5 to be added making 15.8". Then for the 24" of Hor. Par.x remaining I go T.A. Same page & opposite 20" at the side and under 4 at the top stands 29" this added and we have 15.37" the correction of T.19th. this place in Col. 3d (opposite work) Then to find the log of T.19th as used in Col. 2d marked thus ✱. I go to 117 Page. And opposite to Hor. Par.x at the side 55.20" and under the nearest degree of ☉'s App.d Alt 35° - at the top stands 2231. Then for the 4" remaining of Hor. Par.x I go to T.C. and 4" gives — 7 this add and we have the Log. of Table 19 this place in Col. 3d — 2238 Marked thus ✱.

Lunar Observation (Page 232 Bow

Suppose on the 7 of Jany 1836 Sea acct at 11.57 past Midnight mean time in long. 127°.30'. E. by Acct the Obs.d dist of the D's F.L. from the Star Alderan was 68°.36'. Obs.d Alt of the D's L.L. 34°.43' ☾'s Alt. 32°.14' – What was the longitude in?

Preparation.

Sea Acct Jany. 7th is by N. Almanac is Jany 6d. 12h. 11m. 57s

Longitude in 127°.30' E. of Greenwich in time ... 8h. 30m. 00s

Reduced or Greenwich Time ... 6d. 3h. 41m. 57s

D's Semidi.r Jany 6th (a Noon 15.05

" do at Midnight 15.09

Difference of – 4

By T. 11h. 4 diff gives 1

This added to 15.05 ... 15.06

Augmented by T. 15 15.06

D's. Semidiameter 9

Semidiameter 15.15

D's Hor. Par Noon 55.20"

do. Midnight – – 55.34

Diff in 12h. .14

By T. 11. 14 gives 4

This ad.d 15.20" is 55.24

Hor Par.t 55.24"

D's Ob.d Alt. ... 34°.43'

Add ... 12

D's App.t Alt 34°.55'

☾'s Ob.d Alt. 32°.14'

Subtract 4

☾'s app. alt. 32°.10'

Observed distance of ☾ and D's F.L. 68°.36'.00"

D's Semidiameter Subtract ... 15.15

To find the True distance 68°.20'.45" App.t dist

App. dist. 68.21

☾'s app.t alt. 32.10

D's. App alt. 34.55

Sum ... 125.20

½ Sum 67.43

App.t dist. 68.25

Remainder 00.38

½ Sum 67.43

☾'s alt. 32.10

Diff 2d Rem 35.33

Col. 1st

Sine ... 9.9682

2d Rem 35.33 Cos.t 0.2355

1st Rem.r 38 Sec.t 0.0000

Table 17th. log. . 1.7015

The P.L. of this . . 1.9055

Is found in Table 22d. This 2.14"

1st Corr. Carried to Col. 3rd. .

Col. 2d

Same ... 9.9682

Same ... 0.2355

½ Sum 67.43 Sec 0.4212

Table 19th. log ☾ 0.2338

Pro. Log of this 0.8587

is by T. 22d – 25.30 and

Carried to Col. 3d 2 Corr.

Col. 3d

App.t dis less 2 = 68°.20'.45"

Table 17th. – 55.29

Table 19th ☾ – 15.37

1st Correction 2.14

2d Correct.n 25.30

Table 20th. . – .25

True dist. 68°.03'.00"

To Find the Longitude

The True distance 68°.03'.00"

Dist by N. A Under 3h. ... 67.41.43 } Pro. Log. Oppo. dist N. A. P. L. – 2872

21 " 17. T. 22 Pro. Log 9272

6400 P.L. 0.41.14

Add 3h. 3.0000

Mean time at G. 3.41.14

Mean Time at Greenwich 3h. 41m. 14s

Mean Time at Ship 12h. 11m. 57s

The diff. of time is Long.e in 8.30.43 = 127°.30'.43" East

When mean Time at Ship being greater than the Greenwich time the Longitude is East, but if less it is West

The true time at Ship is 8h. 30m. 43s – more than the time at Greenwich. This turned into time Table 21st. page 131 gives the Longitude in 127°.30'.43". East

Note. Example 2d — Opposite Page 1.

In this case the distance of the Moon from the Star Antares was measured on the 2d day of April Sea acct at 2h. 03m. 50s A.M. Or in other words. 2h. 03m. 50s past midnight (Sea acct) Which is by N.A. One day less than Sea acct April 1d. 14h. 03m. 50s. Reckoned thus. From the 1st of April to Midnight is 12 hours to this add the 2h. 03m. 50s past Midnight and we have 1d. 14h. 03m. 50s as the time of Observation — Then turn the Longitude into time by Table 21st. Or by Multiplying the long by 4 and dividing by 60 and we have the longitude in time in this case the long. is 172°-E.

4.0) 688 = 11h. 28m This Subtracted (being East) from the time of Observation and you have the time at Greenwich or Reduced time

In finding the Semidiameter and Horizontal Parallax be careful to correctly apply the correction of Table 11th. Also to apply the Sun & Moon's Semidiameter correctly if the nearest limb is Observed Add if the Farthest limb is Observed Subtract the Semidiameter from the Observed dist.

Table XIX. (See page 120) With D's Appt. Alt. 45°.35' and Hor. Par. 58'.42" I enter the Table and Opposite 45°.30' of Alt under Par. 58' — at the top stands 19'.17" Then for the 42 Remaing of Parallax I go to "Table A" And opposite 40 & under stands 12 — this add — then for the 5m. alt I go to T.B. opposite and find 5 gives 3. this add and we have = 19'.32" — this place in Col. 3d as Correction of T.19" + —

Then with 58'.40" in the side Col. and under 45°p stands 1945 — And for the 2 remaing of Par. I go to T.C. and find 2 gives 9. this added = 1954 the log of T.19" this place in Col. 2d. of the opposite Work.

Example 2d. Page 233

Preparation.

Sea Acct April 2d is by N.A. April 1d. 14h. 03m. 50s

Longitude in 172°. East in time 11. 28. 00

Reduced, or time at Greenwich App. 1. 02. 35. 50

D's Semidiameter App. 1P. Noon 15.59 Hor Par Noon 58.38 ☆'s Alt. Ob. 68°.29

" Do do Midnt. 16.04 do Midnt. 58.56 Subtract 4

Difference . . . . . 5 Difference 18 ☆'s Alt. 68°.25

Table 11th. 5 diff. gives one . . . . 1 Table 11th. . . 4 D's Obs Alt 45°.23

1 added to 15.59 first taken out . . 16.00 D's Hor. Par 58.42 Add 12

Augmented by Table 15th. . . . . 11 D's App Alt 45°.35

D's Semidiameter . . . 16.11"

Observed Distance ☆ & D.F.L. . 61°. 04. 00"

Subtract D's Semidiameter 16. 11

Apparent distance 60. 47. 49

To find the true Distance

Col. 1st	Col. 2d	Col. 3d
App. dist. 60.48.	Sine . . . 9.9419	Same . . . 9.9410
App alt. 68.25	2d Rem 18.59 Cose 0.4877	Same . . . 0.4877
App alt 45.35	1st Rem 26.30 Sec 0.0480	½ Sum 87.24 Sec 1.3433
m . . 174.48	Table 17th. log. 1.9438	Table 19th. log. . . 0.1934
87.24	The P.L. Log of this 2.4311	The P.L. log of this 1.9674
1st Rem 26.30	is the 1st. Cor. 0.41.	is the 2d. Cor 1.56
2d Rem 18.59		

App. dist less 2° = 58°. 47'. 49"

Table 17th. . . 39.37

Table 19th. . . 19.32

1st Cor. Col. 1st. 0.41

2d Cor. Col. 2 . . 1.56

Table 20th. . . 19

True dist. 60°. 09'. 54"

To find the true Longitude

True distance 60°. 09. 54".

Dist by N.A at 0h. 61. 40. 13. P.L. 2348. Found in N.A. opposite the dist.

Difference 1. 30. 19 P.L. 2995. Taken from T. 22d. the log of 1.30.19"

The P.L. of . . Difference 0647 is 2h. 35m. 06s

Add No hours . . . 0. 00 00

Mean Time of Obs. at Greenwich 2h. 35m. 06s.

Mean Time at Ship 14h. 03m. 50s

Difference is the Long in time 11h. 28m. 44s = 172°. 11 East.

Longitude in 172°. 11. East from Greenwich

Ships Chronometer Long by her dayp
West from Greenwich 70:08 - 69.08 -
68.31 -

31

September 27, 1852

Hazy Chronometers Long days

70. 11. West - 69.25 - 66.00

Messrs

Journal On Board Bark

April 17th 1856

This day commences with light breeze & clear weather at 1 o'clock P.M got under way from Atacames with Water & Wood on board for a Cruse

Lat 1.29 N

Thursday April 18 Long 80 35 W

This day light winds & clear weather heading N.W saw Blackfish saw the Land & three Steamers bound South wore Ship in Shore saw one Ship land in Site

Lat 1.14 N

Friday April 19th 1856

This day brisk breez heading in at 6 P.M tacked of Shore saw the Ships laying at Anchor in Atacames

Lat 1.40 N

Sunday 20 of April Long 80.45 W

This day fine weather & Cloudy heading N.W by W

Lat 2.30 N

Long 81.30 W

Monday April 21th

This day brisk breezes & Cloudy weather wind S.W.P heading W.N.W Lat part squally rainy Weather

Lat 3 17 N

Long 82.09 W

Helen Snow of New Bedford

Tuesday April 22 1856

This day Com with Strong winds & a bad Sea heading W by S & W S W saw porpoises
Lat 2 54 N
Long 82 52 W

Wednesday April 23 th

This day Com with fine weather Course Changed S & W Light airs Saw a Turtle
Lat 2 38 N
Long 83 45 W

Thursday April 24

This day light airs & Calm & Strong breezes with rain
Lat 2 45 N
Long 84 55 W

Friday April 25 th

This day Strong winds & Cloudy weather heading W by S
Lat 2 25 N
Long 87 08 W

Saturday April 26 th

This day Strong winds & Rugged took in Main Topgallen Sail
Lat 1 44 N
Long 89 02 W

Sunday April 27 th

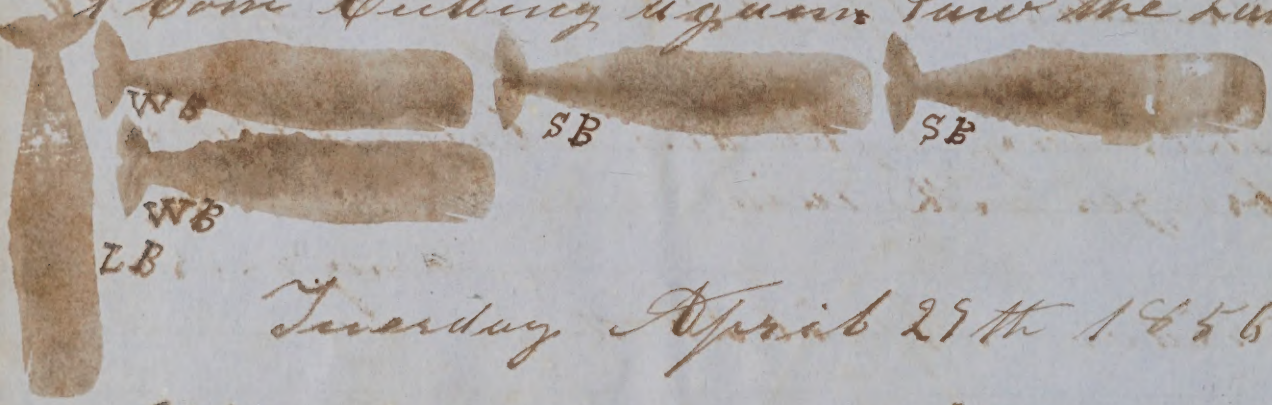
This day Com with brisk breezes & clear heading S W by S Lat part moderate at 11 P M made Abingdon Isl bearing S S W Distant 30 Miles at 12 o clock
Lat 00 50 N
Saw a Shoal of Sperm Whales
Long 90 15 W

24

Off the Galapagos Islands

Monday April 28th 1856

This day fine weather at 1 o'clock lowed the boats Stanch & Killed three Cow whales at 5 got them along side made sail heading to the N E Lat part fine Commenced Cutting at 7 P M saw a Shoal of Sperm Whales going to the N E lowed the boats Stanch & Killed two at 10 o'clock got them along side & Com Cutting again saw the Land



Tuesday April 29th 1856

This day moderate fine weather All hands imployed in Cutting Cutt in 4 of them Com boiling 3 o'clock its daylight Cut in the other whale all hands imployed in laying off the Culpepers Islands in Site

Lat 1 47 N
Long 91 47

Wednesday April 30 the

This day light airs & Calm heading to the S E all hands imployed in boiling & Setting up Spouts

Lat 2 04 N
Long 91 36

Cruiseing

May 1th 1856

Thursday

This day fine weather at 5 o'clock wore Ship to S W all hands imployed in boiling. Lat 2. 29 N
Long 92, 39 W

Friday May 2 th 1856

This day light airs & Clear weather at 2 P M Finished boiling
Lat 2 41 N
Long 92: 00 W

Saturday May 3 th

This day light airs from N W & W and Calm imployed in Coopering
Lat 2 45 N
Long 92 57 W

Sunday May 4 th

This day light breezes ~~wind~~ from S W heading S E Mid & Lat parts fine breez
Lat 2, 23 N
Long 92.32 W

Monday May 5 th

This day fine breezes heading S E & E Saw a Ship of the lee bound at daylight Saw the Cutspers all hands imployed in Stowing down in the main hole
Lat 1. 30 N

Tuesday May 6 th

Com with a Very Strong breez & rugged Stowing Oil finished Stowing down Saw a Ship Inbound in Sight
Lat 1 25 N Long 92 15 W

Bark Heber Snow of New Bedford

Wednesday May 7th 1856

This day moderate breezes & Clear weather
imployed in working Ship Lat 00 53 N
Long 92 40 W

Thursday May 8th

This day moderate breezes & Clear
weather Saw a Ship Lat 44 N
Long 92 01 W

Friday May 9th

This day moderate weather at
Spoke the Br Tuscan of New
Stanton 31 months out 1100 Bls
Lat 32 min N

Saturday May 10th

This day Calm imployed in over
hauling Old Shooks Saw 3 Sails
Lat 20 m N
Long 92 14 W

Sunday May 11th

This day light airs and Calm Islands
in Sight Saw too Sails Lat 18 m N
Long 91 48 W

Mondays May 12th
This day light airs & Calm
North head Bruiring S S E 9 mi Lats 07 m N
Saw two Sails Long 91 44 W

Of The Gallapagoes Islands

Tuesday May 13 th 1856

This day Calm & foggy & light airs
Laying in between Rock Crusoe & Albemarle
at 6 A M went in Fishing

Wednesday May 14 th 1856

This day Calm too Ships in Site
Saw Blackfish Lowed & got one a strong
Current to the N W light wind from S W
Lat 23 m N

Thursday May 15 th

This day a fine breez from the S S W
Steering N W & Lat part Calm Lat 41 m N
Boarded out the Blackfish Long 91 34 W

Friday May 16 th 1856

This day Calm with lights & hazy
weather Saw the north point of Albemarle
Lat 1. 12 N
Long 91 - 16 W

Saturday May 17 th

This days light winds Saw Hermaneu Is
Sunday 18 th Lat 49 m N
This day Calm Saw finbacks Blackfish
& Porpoises it Continues Calm
Lat 34 m N
Long 91 24 W

8

Journal on Board Bark Helen

Monday May 19 th 1856

This day Com with Calm Cloudy weather Calm all these 24 hours Albemarel in Site Saw a ship

Tuesday May 20 th 1856

This day Com with Calm Cloudy weather & thee Current Setting to S W Mid & Later parts light breez Saw a Ship
Lat 49 m N

Wednesday May 21 th

This day Com with moderate winds at 2 P M Spoke the Mary Wilder of New Bedford Lace 22 months out 900 Sperm Mid & Lat parts fine at 12 o clock Hennan Island bore South 10 miles Saw a ship Supposed it to be the Mary Wilder
Lat 1 31 N

~~Wednesday~~ Thursday May 22 th

This day Com with light Trades & fine weather Saw Blackfish Mid part light winds heading to the S W Lat part brisk breezes tacked Ship to E S E the Mary Wilder off to leward Saw nothing this days Lat 1 14 N
Long 82.42 W.

Journal of New Bedford

Fridays May 23 th 1856

This day Com with fine Trades & hazy weather Mid & Lat part the same Saw three Ships of the Lee beam Lat 1 49 N
Long 92 49 W

Saturday May 24 th

This day light trades heading to the Eastward with a Strong North West tide Saw six Ships
Lat 2 12 N

~~Saturday~~ Sunday May 25 th

This day Com with light Trades heading N & Saw Blackfish & to Ships Lat 2.36 N
Long 92,10 W

Monday May 26 th

This day moderate winds & hazy weather tacked Ship to the South Lat part very fine Saw Blackfish lowed & got one Saw Five Ships Lat 1 56 N
Long 92. 39 W

Tuesday May 27 th

This day very fine Clear weather Mid part Calm Lat part light airs Saw 4 Ships imployed in boiling out the Blackfish Lat 2 13 N
Long 92 09 W

Journal on Board Bark

Wednesday May 28th 1854

This day Com with light Trades from S S E at 5 P M lowed the boats & got three Blackfish Mport Calm Lat part fine Trades saw three Ship

Lat 2 33 N

Thursday May 29th Long 91 48 W

This day Com with fine Trades but hazy weather Lat part light Trades Spoke the Bark Hearnder of New Bedford Later 32 months out 1150 bbls Bought Bread of her imployed in boiling Black

Lat 3.00 N

Friday May 30th Long 91, 06 W

This day Com with Strong Traids Mid & Later parts very moderate saw three Ship

Lat 3.10 N

Long 92 08

Saturday 31 of May 1854

This day Com with Calm heading to the S W Mid part light winds Lat part Strong Trades tacked Ship to the East saw one finback & two Ships So ends this month

Lat 2 54 N

Long 92 32 W

Helen Snow of New Bedford

Sunday June 1th 1856

This day Com with Strong Trades & Clear weather Mid part light Trades heading E & E Lat part fine at 6 P M Saw a large Cow of Sperm whale going to the S E bored the boat Struck & killed one large one to the Larbord Boat Saw 4 fore other Ships all whaleing So ends

L B 90 Bls

Lat 2.30 N Long 92.10 W

Monday June 2th 1856

This day Com with fine weather at 1 P M of the whale along side at 3 hoisted on at dark dark down Mid & Lat parts fine at daylight Com Cutting Saw two Ships boiting So ends this day Cutting

Lat 3 58 N
Long 91.37 W

Tuesday June 3th

This day Com with Strong Trades at 3 P M finished Cutting Mid part Com Boiting Lat part very rugged reefed topsails

Lat 4 11 N
Long 92.13 W

Wednesday June 4 th

This day Com with Strong Trades & rugged weather Mid & Latt parts moderate wore Ship to E all hands imployed in boiting

Lat 4 00 N
Long 92 35 W

Cruiseing for Sperm Whales

Thursday June 5 th 1856

This day Com with moderate weather
Mid part finished boiling at midnight
Lat part implayed in Cleaning up
decks
Lat 4 13 N
Long 91 52 W

Friday June 6 th

This day Com with moderate
weather Mid & Lat parts very light airs
Saw porpeses
Lat 4 40 N
Saturday June 7 th Long 91 24 W

This day Com with light Trades &
Clear weather heading to the Eastward
Mid & Lat parts brisk breezes heading S E
Lat 4 27 N
Sunday June 8 th Long 90 27 W

This day Strong Trades from S S W heading
S E Mid & Lat parts much the Same
Lat 3 27 N
Monday 9 June 9 th Long 90 18 W

This day Com with Strong Trades
& Cloudy weather heading S E by E
Mid & Lat parts The
Same implayed in Coopering
Lat 2. 37 N
Long 88 08

13

Journal Helen Snow

Tuesday June 10th 1856

This day Com with Strong Trades & Cloudy weather tacked Ship to S W Mid part the Same Lat part imployed in Stowing down in the after hold Sounds

Lat 2 13
Long 89. 32

Wednesday 11 June

Wb 32 Wh

This day Came withe Strong Trades imployed in Stowing down at 1 o'clock P M Saw Sperm whales Close to the Ship gaffed them with the Ship lowed two boats Struck & killed one to the Waste boat & took him a long Side finished Stowing down in the after hole Mid purd. heading S E Lat part fine at 7 o'clock hoisted on at 10 O got through

Lat 1 56 N
Long 89 46 W

Thursday June 12th

This day Com with moderate winds & Cloudy weather heading W S W at 1 o'clock Commenced boiling ~~at day~~ Mid part fine at daylight finished boiling Saw to Ships imployed in Setting up Shrouds.

Lat 1 42 N
Long 90 48 W

On Crouzing ground

Friday June 13th 1856

This day Com with brisk Trades
tacked. Ship to E Mid part the same
Lat light Trades tacked to the S W imployed
in Ships duty Lat 1 40 N
Long 90 08 W°

Saturday June 14th

This day Com moderate Trades
& Cloudy weather heading to the S W
Lat Mid & Lat parts much the same
at daylight Saw Abindon Reept of N W
Saw one Ship at 10 A M Saw Wenman Isl

Sunday June 15th 1856

This day Com with fine Trades
at 4 P M Spoke the Wm Henry
of Fairhaven Grinnell 6 months out
60 bbls Sperm She was boiling Mid &
Lat parts fine Saw three Ships Wenman
Island in Site Lat 57 m N
Long 91 50 W°

Monday June 16th

This day Com with moderate Trades
& clear weather Mid parts the same
Lat parts Strong Trades & Cloudy all hands
imployed in Stowing down in the fore
hole at dark finished Saw two Ships
Culpepper bearing E distant 10 miles

Off Cartepepper Islands

Tuesday June 17 th 1856

This day Com with brisk Trades & Cloudy weather Steering N W Mid part heading by the wind Lat part Strong Trade turtles to W S W Saw three Ships

Lat 1. 44 N

Wednesday June 18 th Long 92 14 W

This day Com with Strong S E Trades & Cloudy weather Mid parts the Same Lat parts the Same took in the light Sails heading S W by W Saw nothing Sounds

Lat 1 33 N

Thursday June 19 th Long 94 37 W

This day Strong Trades & rugged Mid parts the Same Lat parts more moderate heading E

Lat 1 43 N

Long 94 25 W

Friday June 20 th

This day moderate Trades & Cloudy weather heading E Mid & Later parts very much the Same Lat 1 42 N

Long 93, 30 W

Saturday June 21 st

This day Com with fine trades Mid & Later parts moderate heading N E Commenced wetting Hole for the first time

Lat 1 54 N

Long 93 06 West

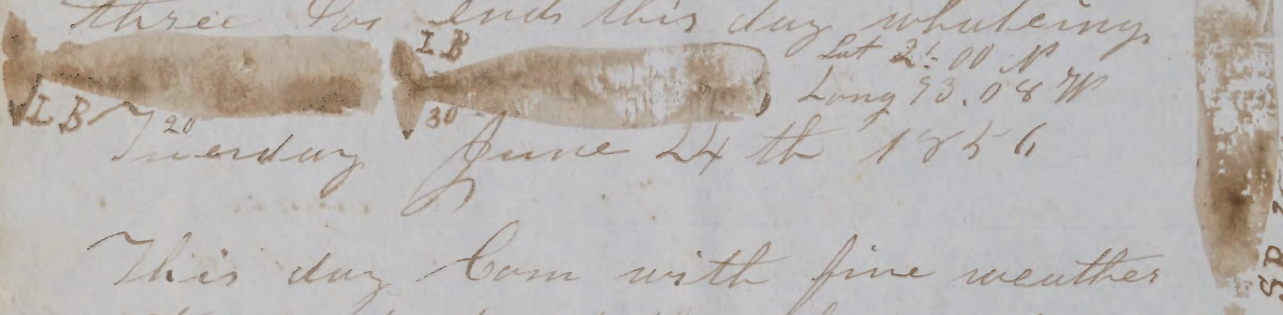
Journal on Board Burk

Sunday June 22 th 1856

This day Com with moderate Trades & Clear weather heading E N E Mid & Lat parts very fine Lat 1 50 N
Long 93, 17 W

Monday June 23 th

This day Com with moderate Trades and pleasant weather Mid & Lat parts the same at 8 o'clock A M saw a Spout of Sperm whale going to the S W Lowed the Boats Struck and Killed three Sperm and this day whaleing Lat 2 00 N
Long 93. 08 W



Tuesday June 24 th 1856

This day Com with fine weather at 4 o'clock got the whales along side hoisted on and Cut one of them in Mid part one watch Clearing up the decks Lat part all hands imployed in Cutting finished at 12 o'clock Lat 1 40 N
Long 94 24 W

Wednesday June 25

This day Com with brisk Trades and Clear weather heading to the S W at 2 A M com boiling Mid and Lat parts fine were Ship to E imployed in boiling
Lat 49 mi N
Long 96 : 08 W

Helen Snow of New Bedford

Thursday June 26 th 1856

This day Commencing with fine weather heading E by N Mid & Lat partes Strong Trades and rugged finished bowling at 12 o'clock
Lat 54 mi N
Friday June 27 th Long 96 02 W

This days Commencing with Strong Trades and Cloudy weather heading E a gunate a very Strong Cuente Mid and Lat parts the Same took in the Main top gallant sail
Lat 1. 16 N
Saturday June 28 th Long 95 21 W

This day Commencing with Strongs Trades and a ruff Sea Mid and Later partes the Same saw lots of Birds Lat 1 54 N
Long 94 32 W
Sunday June 29 th

This day Commencing with Strong Trades & Cloudy weather heading E by N Mid and Lat partes very moderate Lat 2 16 N
Long 93 25 W

Monday June 30 th

This day Commencing with moderate Trades and Cloudy weather heading E by N Mid and Lat partes moderate and fine weather implayed in Coopering Lat 2 07 N
Long 92.42

Off Thee Cutsoppers

Tuesday July 1th 1856

This day Com with moderate Trades and Cloudy weather heading E Mid parte the Same Lat Strong Trades Saw the Island of Cutsepper I Saw too Ships all hands imployed in Stowing down oil in thee After hole So ends Lat 2.00

Wednesday July 2th 1856

This day Com with moderate Trades heading Ely N Mid part the Same Lat part tacked Ship to S W Saw five Ships imployed in Ships duty Lat 2.04 N
Long 92.00 W

Thursday July 3th

This day Com with fine weather at 4 o'clock were Ship Mid and Lat parte moderate Saw Seven Ships Spoke the Ship Hesper of Fairhaven Stevens 24 months out 300 bbls Lat 2 15 N
Long 91 41 W

Friday July 4th

This day Com with moderate Trades Mid and Later parte thee Same all hands imployed in Gamming with five Ships Celebrateing the forth of July

Off The Galapagos Islands

Saturday July 5th 1856

This day Com with moderate Trades and fine weather Mid and Lat parts, the Same tacked Ship to the westward Saw peces of Squid

Lat 3 02 N
Long 92 17 W

Sunday July 6th

This day Com with fine weather Mid and Later parts the Same at 4 o'clock ~~Saw~~ a P M Saw a Large bone Whale going quick to the North Lowed the boats but without Success Saw to Ships

Lat 3 08 N
Long 92 19 W

Monday July 7th 1856

This day Com with fine Trades and Clear weather heading W S W Mid & Lat parts fine moderate weather tacked Ship to E Saw one Ship

Lat 2 59 N
Long 92 30 W

Tuesday July 8th

This day Com with moderate Trades and fine Weather Mid and Lat parts the Same tacked Ship to West at 3 o'clock wore Ship to the S E Saw nothing

Lat 3,17 N
Long 92 24 W

Journal on Board Park

Wednesday July 9th 1856

This day Com with fine weather heading S.E. Mid & Later parts the Same imployed in mending thee Fore sail

Lat 3 00 N
Long 91 32 W

Thursday July 10th

This day Com with fine Trades but Cloudy weather heading S. E by E Mid parts the Same Lat parts Strong Trades to Red to West imployed in mending thee Fore Topsail so ends

Lat 2 27 N
Long 91 46 W

Friday July 11th

This day Com with Strong Trades and Cloudy weather heading W S W Mid and Lat parts thee Same saw Blackfish and peces of Squid at 4 o'clock to Red Ship

Lat 2 50 N
Long 93 23 W

Saturday July 12th

This day Com with Strong Trades and Cloudy weather at 4 o'clock to Red to E Mid and Lat parts fine saw two peces of Squid

Lat 2 37 N
Long 92. 31 W

Helen Snow of New Bedford

Sunday July 13th 1856

This day Com with fine moderate Trades and Clear weather heading E Mid and latter partes moderate Cloudy weather

Monday July 14th 1856

This day Com with moderate Trades and Cloudy weather heading S W Mid turkey Ship to East Lat parte Squally Saw a brecha

Lat 2 19 N

Tuesday July 15th Long 92 18 W

This day Com with fine Trades and Clear weather heading E Mid and Later partes Strong Trades at daylight Saw three Cat Jeppers Island Saw a Ship

Lat 1 50 N

Wednesday July 16th Long 91 50 W

This day Com with Strong Trades and Cloudy weather heading S E by E Mid and Latter partes moderate

Lat 1.09 N

Thursday July 17th Long 91 16 W

This day Com with Light and Calm Mid parte the same Lat parte thick hazy weather made Wenman Id at dark it bore E N E distant 5 miles

Of The Culpepper Jas

Friday July 18 th 1856

This day Com with thick hazy weather Mid parte much the same Lat parte fine heading W & W Saw finbacks

Lat 1 02 N

Saturday July 19 th Long 93 25 W

This day Com with brisk Trade and Cloudy weather heading W & W Mid and Later parts the same at 12 o'clock tacked Ship to E & E

Lat 57 ms N

Long 95 04 W

Sunday July 20 th

This day Com with Strong Trades and Clear weather heading E & E Mid & Later parts moderate winds & pleasant weather

Lat 37 ms N

Long 94 45 W

Monday July 21 th

This day Com with light Trades and pleasant weather heading E by S Mid & Later parts brisk Trades

Lat 45 miles N

Tuesday July 22 th Long 94 07 W.

This day Com with brisk Trades and Cloudy weather Mid and Later parts the same heading E

Lat 54 miles

Long 93 16 W

Cruising for Whales

Wednesday July 23 th 1856

This day Com with Strong Trades and fine weather steering N N E Mid part by the wind Lat parte Steering N N W

Thursday July 24 th 1856

This day Com with Strong Trades and Cloudy weather Steering by the wind heading E by S Mid part the same Lat parte hazy at Daylight saw Wenmans Island

Lat 1 23 N
Long 92 10 W

Friday July 25 th

This day Com with light Trades and thick weather Mid parte very moderate Lat parte fine breeze Wenmans Id bearing S W Distant 35 miles

Lat 1 42 N
Long 91 32 W

Saturday July 26 th

This day Com with moderate Trades & Cloudy weather heading E Mid & Later parte very much the same saw Finbacks and Blackfish

Lat 1 49 N
Long 90 36 W

Bound in Shore

Sunday July 27th 1856

This day Com with fine Trades and Cloudy weather heading E Mist parts moderate Lat parts much the same heading E by S Lat 1 44 N
Long 89 - 47 W

Monday July 28th

This day Com with strong Trades and Cloudy weather heading E by S Strong Trades all there 24 hours throw
Lat 1 - 18 N
Long 88 32 W

Tuesday July 29th

This day Com with strong Trades and Cloudy weather heading E S E Strong Trades all there 24 hours fair finished
Lat 59 mil N
Long 87 24 W

Wednesday July 30th

This day Com with Strong Trade wind Cloudy weather heading E S E Strong trades and Squally all there 24 hours through
Lat 39 miles N
Long 86 09 W

Thursday July 31th

This day Com with Strong Trades & Squally weather heading E S E Mist Lat 15 miles N and Later parts the same tacked Long 85 42 W

Journal on board of the Barque

Friday August 1st 1856

This day commence with Strong Trades and Cloudy Squally weather Strong Trades all there 24 hours through saw a Ship

Lat 1 mile N

Saturday August 2 Long 64 47 W

This day Commence with Strong Trades and Cloudy weather heading E by S Mid and Lat parts the same Spoke the Barque Hercules Potter & saw one other Barque at dark we reefed topsails & tacked Ship

Lat 21 m S

Sunday August 3th Long 63 29 W

This day Commence with Strong Trades and Cloudy weather Mid & Later parts moderate heading W by S saw a fish

Monday August 4th

This day Commence with moderate Trades and Cloudy weather Mid and Later parts the same heading W by S ~~at~~ Employed in putting a new bunt in to the Main topgallant sail saw Blackfish at Sunset tacked Ship to E & E

Lat 26 m S

Long 65 44 W

Hester Swore of New Bedford

Tuesday August 5th 1856

This day Com with fine moderate Trades but Cloudy weather Mid and Later partes the same Steered N E

Lat 33 m S

Wednesday August 6th Long 66 02 W

This day Com with light Trades and Cloudy weather Steering N E Middle part by the wind Lat parte Steering N N E

Lat 37 m S

Thursday August 7th Long 65 09 W

This day Com with moderat Trades Steering N N E Mid parte Steering N Lat parte fine Steering N N E

Lat 12 m N

Friday August 8th Long 84 49 W

This day Com with moderate Trades and fine weather Steering N N E Mid parte Steering E Lat parte Equally Steering N E Saw black fish

Lat 22 N

Long 84 02 W

Saturday August 9th

This day Com with fine Trades Steering N E Mid part North Lat parte strong breze Steering E Saw barke and passed the George Moreland

Lat 1 13 N

Steering N

Long 83 29 W

Bound in Shore

Sunday August 10th 1856

Sunday This day Com with Strong Trades and Clear weather Steering E Mid parte heading S E by E Lat parte the same saw three Ships Lat 38 m N.
Long 82 44 W

Monday August 11th

This day Com with fine Trades but Cloudy Sky Steering E Mid parte the same Lat parte much the same at 4 A M saw the Land Stood Close in to it Saw a number harbours at Sun down keept ler of N W
Lat 41 m N.
Long 81 24 W

Tuesday August 12

This day Com with Strong Trades in by three Land Mid parte Steering to the North Lat parte heading in at 2 P M went on Shore but Could get nothing saw a Bark at anchor to Nacanier Called it the Peri of Nantucket Lat 39 m N

Wednesday August 13th 1856

This day Com with Strong Trades and Cloudy weather heading W N W Lat parte the same at 2 P M saw a ship Chasing whale she got one lored for them but they were gallied we got nothing saw one other Ship Lat 41 m N
Long 81 29 W

Of Marames

Thursday August 14th 1856

This day Com with fine Trades but Cloudy weather Chaseing whales gotten by a noth ship Mid parte heading to the S S E Lat part fine heading N. N. W at dark spoke the Superior of New Bedford Norton 34 months out 800 bbls Sperm and 300 whale at the same time spoke the Roscius of New Dexter 25 m out 850 bbls Sperm

Lat 1 26 N
Long 81 22 W

Friday August 15

This day Com with fine moderate Trades Mid and Latter parter the same at 9 A M saw a ship Chaseing whales the Struck one the next turned to windward we lowered two boats but did not get near them to other Ships Chaseing

Lat 1 54 N
Long 81 36 W

Saturday August 16th

This day Com with Strong Trades and Cloudy weather heading to windward after gotten whales Mid and Latter parter Squally Saw Six Ships

Lat 1 07 N

Sunday August 17th 1856

This day Com with Strong Trades and Squally with heavy rain Steering E S E Mid part under Short Sail heading West Lat parte fine Saw one Ship at Sunset tacked to the S S E

Lat 1 09 N
Long 82 02 W

Of Steamer

Monday August 18th 1856

This day Com with brisk Trades and Cloudy weather heading W N W Mid parts heading S E & Lat parte steering N N E saw two Ships

Lat 50 miles N
Long 44 50 W

Tuesday August 19 th

This day Com with fine Trades steering N E & Mid parts laying aback heading S E Lat parte steering N E & at 3 P M saw a Shole of large whales going to the N E lowed thee boats and gatted them

Lat 1.26 N
Long 81.23 W

Wednesday August 20

This day Com with fine weather boats down Chuseing whales but got nothing one boat darted Mid parte laying aback Lat parte steering N E

Lat 1 24 N
Long 80 47 W

Thursday August 21 th

This day Com with fine weather steering N W & N Mid parts heading to the N N W and steering E Lat parte strong Trades and Squally steering N N W

Lat 1.52 N
Long 81 21 W

Friday August 22 th

This day Com with strong Trades and Cloudy heading N N W Mid and Latter partes rayged on different tacks Sent to Ships

Journal on board Bark

Saturday August 23 th 1856

This day Com with Strong Trades and Cloudy weather heading S E Mid parte the same Lat parte Steering W N W at 10 A M Saw a ship whealing ran for her it was the Statira Burdett Spoke her he was tu Being his whale along side 50 Bl whale Saw to other Ship Lat 1. 17 N he hated 950 Bls Long 81 46

Sunday August 24 th

This day Com with Strong Trade and Cloudy weather heading N by N Mid parte under Short Sail heading S E Lat parte Steering E N E Saw the Statira Cutting her whale

Lat 1 33 N

Monday August 25 th Long 80 50 W

This day Com with Strong Trades and Cloudy Sky heading S E by the wind ~~Lat~~ parte the same Lat the same at 2 P M Saw the F. Land and tacked Ship Saw 2 Ships

Lat 1. 15 N

Tuesday August 26 th Long 80 36 W

This day Com with fine weather heading W by N Mid parte heading off and on Shore Lat parte Steering E by S Saw 4 Ships imployed in Setting up Casks for water at darke Close in to Cathamoo

Lat 1 04

Helen Snow of New Bedford

Wednesday August 27th 1856

This day Com with brick trader Steering E by S ~~Lat parte~~ Mid parte Laying a back Close in to the Land Lat parte Steering down for Esmeraldas at 2 o'clock went in but got ashore on the Point but got of again and went in very well and anchored on the bank of the river

Thursday 28 in Porte 29th 30th 31 th

Monday . September 1st 1856

This day Com with Strong Trades all redy for sea at 3 P M got under way and went to sea in Compana with the Philadelphia left in Porte the Mauritius Dominguez A R Tucker Cachelot Cornelia all Barker

Tuesday September 2th 1856

This day Com with Strong Trades all Clear of the Land employed in stowing the anchors and Chains Mid and Later parts Strong Trades heading W N W at 12 o'clock tacked Ship to S E Saw one Ship

Lat 1 52 N
Long 81 04 W

Off Maranhao

Wednesday September 3 1856

This day Com with fine weather heading S E Mid Squally at 2 o'clock wore Ship to W N W Lat parte the same Saw the Ship Dalawoye Lat 1.31 N
Long 81 09 W

Thirsday September 4 th

This day Com with moderate Trades and Cloudy weather heading W N W Lat part tacked to S E Saw 3 Brks one of them Cutting
Lat 1 48 N
Long 81 39 W

Friday September 5 th

This day Com with moderate Trades heading S E Mid parte Squally wore Ship. Lat parte rugged heading W imployed in mending the main top sail Saw 3 Ships wore Ship at darke
Lat 1 16 N
Long 82 14 W

Saturday September 6 th

This day Com with Strong Trades and rugged heading W Mid parte heading to the S E Lat parte Steering E imployed in working Ship
Saw too Ships Saw Porpoises at Shorten Sail
Lat . 58 m N
Long 81 24 W

of Fernandus

Sunday September 7th 1856

This day Com with Strong Trades Steering N E Mid parte laying with the main Topsail aback Lat parte Steering N W saw three Bark one Cutting and too boiling at darke hoped to aback

Lat 1 44 N
Long 81 45 W

Monday September 8th

This day Com with brisk Trades and fine weather Steering N by W Mid parte laying aback Lat parte Steering E N E

Lat 2 02 N
Long 80 52 W

Tuesday September 9th

This day Com with Strong Trades and Cloudy weather Steering E Mid parte heading S S E at 2 o'clock night tacked to W N W Lat parte squally heading S S E saw one Ship

Wednesday September 10th 1856

This day Com with moderate Trades and Cloudy weather Squalls of rain Mid and Later the Same on different tacks saw one Ship Lat 1 35 N
Long 80 52 W

Thursday September 11th

This day Com with Strong Trades and Cloudy weather Mid parte the Same heading W by S Lat parte Strong Trades reefed the topsails Lat 1 16 N
Saw to finbacks Long 84 55 W

Journal on board Bark Helen Snow

Friday September 12 th 1856

This day Com with Strong Trades and Cloudy weather under double reef topsails Steering W by W Mid parts the Same Lat parts more moderate at daylight Spoke the Cape Horn Pigeon of Dartmouth Mass 27 months out 750 bbls Sperm Lat 1 26 N.
Long 81 39 W

Saturday September 13 th

This day Com with Strong trade and Cloudy weather heading S S E Mid parts under Short Sail heading W Lat parts Squally Steering E Saw one barke Lat 1 22 N
Long 81 05 W

Sunday September 14 th

This day Com with Squally weather Mid parts under Short Sail heading E S E Lat parts fine heading W Saw fore Ships
Lat 1 24 N
Long 81 46 W

Monday September 15 th

This day Com with fine weather heading W Mid parts heading S E Lat parts heading W Saw one Ship Lat 1 09 N
Long 82 45 W

Tuesday September 16 th

This day Com with Strong Trades and Cloudy weather Mid and Lat parts the Same at 3 P M Spoke the Catboat of Nantucket Swain 850 bbls Sper 300 Whale saw two other Ships

Bound in to Fernbey

Wednesday September 17th 1856

This day Com with brisk Trades and Cloudy weather heading S E Mid and Lat parts fine Saw 3 Ships at 4 P M Spoke the Barkey Brougton of New Bedford Swain Lat 42 m N
Long 82 19 W

Thursday September 18th

This day Com with moderate Trades and Cloudy weather heading W Mid parts the Same Lat parts pleasant tacked to S E at 3 P M saw a Whale to windward thought it was a Sperm whale but did not no
Lat 1 05 N

Friday September 19th Long 83 30 W

This day Com with brisk Trades and fine weather Mid and Lat parts the Same heading S E and E by S Lat 19 m N
Long 82 28 W

Saturday September 20th

This day Com with brisk Trade and Cloudy weather heading S E Mid parts the Same Lat parts hazy weather tacked Ship to W at Sunset tacked to S S E

Sunday September 21st 1856

This day Com with Strong Trades and Cloudy weather heading W Mid and Lat parts Strong Trades and flying on different tacks Saw one Ships Lat 40 miles South
Long 82-03 W

Journal on board of Bark Helen

Monday September 22th 1856

This day Commences with Strong Trades and Cloudy weather working up to Jamaica Mid and Later partes the Same imployed in mending the Fling Jill Lat 1.06 S

Long 82.29 W

Tuesday September 23th

This day Com with moderate Trades and Cloudy weather on different tacks Mid and Later partes the Same at 9 A.M Saw Neptat Saw and bored for Hornbacks Saw two Ships

Wednesday September 24th

This day Com with moderate and Clear weather Mid and Lat partes the Same Painte St. Helena in Site imployed in Cleaning Chane

Thursday September 25th

This day Com with moderate Trades and Cloudy weather heading on different tackes Mid and Lat partes the Same imployed in mending the Mainsail Saw one Ship Short in with the Land

Friday September 25th

This day Com with moderate Trades and Thick weather Mid and Lat partes Strong Trades and a bad Sea on different tacks Saw one Ship

Snow of New Bedford

Saturday September 27 th 1856

This day Com with Strong Trades and Cloudy weather heading S. E. Mid parts buzzed about Lat parts Steering S. E. Set the fore topsail Steering suit at 10 o'clock saw St Clara Island at 7 o'clock P M came to Anchor in Tumbes in 4 fathoms 5 Ships laying at anchor So ends

28 th 29 th 30 th

Oct 1 st 2. 3. 4 th

Sunday October 5 th 1856

This day Com with fine weather Laying at Anchor at Tumbes at 2 o'clock got under way with a fine breeze in company with the Bark Stella left two Ships at Tumbes So ends

Monday October 6 th 1856

This day Com with fine Trades and pleasant weather heading up to Paita Mid & Later parts fine saw one Ship Lat 3-41 S

Long 81 3 W

Tuesday October 7 th

This day Com with Strong Trades heading to Paita Mid parts very Strong Trades double reefed the Topsails Lat parts the same saw a bark Steering N land in Site

Wednesday October 8 th 1856

This day Com with Strong Trades and hazy weather Mid and Later Parts the Paita heads in Site Lat 4 33 S

Off Paita

Thursday 9th 1856

This day Come with moderate Trades and hazy weather at 12 o'clock arrived at Paita and went on Shore October 10th of & on 11th To 12th of and on

Monday 13th of October

This day Came with fine pleasant weather all on board and standing out to Sea with the Barck Stella Mid & Later parts moderate winds and hazy weather at 10 A M kept of W S W tried twice for blackfish struck one and the Iron Strap parted Lat 5 - 20 S

Long 83 22 W

Tuesday October 14th

This day Came with moderate breezes and hazy weather Steering W Mid and Lat part the Same Saw Blackfish tried got one Saw a brig Steering N employed in turning down the main Rigging Lat 5 - 11 S

Long 85 04 W

Wednesday Oct 15th

This day Came with moderate winds and fine weather Steering W Mid and Lat parts the Same Saw blackfish Lat 4 - 16 S

Long 86 31 W

Thursday Oct 16th

This day Came with fine Trades and pleasant weather Steering W Mid parts Steering N 75 W Mid parts the Same Lat parts do Steering N 75 W

Lat 3 - 37 S

Long 87 03 W

69

Journal for the Latter part of Returns

Friday October 17th 1856

This day Commenced with moderate Trades and fine weather steering N W Mid and Lat parts the Commenced at 2 o'clock P M made Chatham Island bearing W distant 20 miles So ends

Lat 55 mid S

Saturday October 18th Long 84 45 W

This day Commenced with Strong Trade & hazy weather heading by the wind at daylight tacked Ship to the Eward at daylight tacked to S W. at 12 o'clock Close in to South Island at 2 P M Saw a Shole of Sperm whales going N W boat Struck & killed one got him along side at 5 o'clock So ends Lat 1-19 S

Long 49-30 W

40 bls SB

Sunday October 19th

This day Commenced with moderate Trades and Cloudy weather boats of whaleing Mid parts light winds under all sail heading E S E with the whale along side Lat parts quite ragged at daylight Commenced Cutting at 11 o'clock got through and made sail to hold on at 2 P M Commenced boiling

Monday October 20 1856

This day Commenced fine Trade & Cloudy weather heading E S E Middle & Lat parts Squally at 7 A M Struck Ship to S W at 2 P M wore Ship to E Chatham bearing N distant 15 miles ~~Wind moderate~~ So ends this day boiling

Off Galapagos Islands

Tuesday October 21st 1856

This day Comm with Squally weather heading E & S E Mid parts the same at 7 o'clock finished boiling Lat were ship and Sheared W & N at 3 P M saw a whole of large Sperm whales going N W got in a mongst them with the Ship lowed the boats came near getting on but they went to windward Chatham Isl 20 miles off

Wednesday 22 of October 1856

This day Comm with fine Trades but Cloudy weather Chasing whales but got none Mid parts tacked in for Chatham Isl Lat parts tacked of at 10 A M saw a whole of Sperm whales going to the N W lowed the boats but without success Chatham Island bearing S 25 miles

Thursday 23 of October

This day Comm with light Trades and Clear weather Chasing whales got nothing Mid part moderate Lat parts fine breezes Chatham Island bearing S W 30 miles Lat 20 South

Long 88 50 W

Friday October 24th 1856

This day Comm with Strong Trades and Cloudy weather heading E by S Mid Lat parts Strong winds took in the light sails Chatham Isl in sight

Lat 38 m S

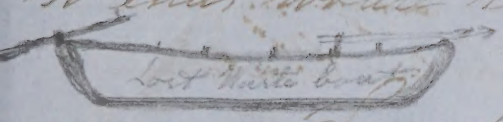
Saturday October 25th Long 88 47 W

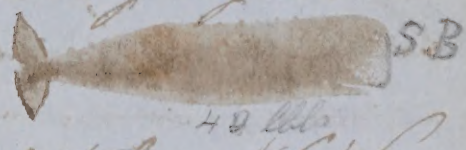
This day Comm with Strong Trades & Cloudy weath

of Galapagos Islands

Saturday October 25 th

This day Commences strong trades and cloudy weather Mid parts the same Lat Steering N.W. by N with hazy weather saw the Ship Atlanta at 5 o'clock P.M. saw a whole of Sperm whales going to the N.W. lowered the boats and Stewart killed one to the Starboard boat the Master Lost got Stove & we took his with everything belonging to her So ends whale raising bad





Sunday 26 th of October 1856

This day Commences with Strong Trades and thick hazy weather fast to the whale not turned up at dark Mid parts raney at 10 o'clock night got the whale along side & made fast heading E with a light breeze Lat parts Strong trades at 7 o'clock Commences cutting at 12 o'clock finished So ends Lat 0 6 m S

Indefatigable in Site

Monday 27 of October

This day Commences with Strong Trades & Cloudy weather heading on different tacks at 4 P.M. Commences boiling Mid & Lat parts Cloudy weather boiling heading E So ends this day

Tuesday October 28 th

This day Commences with Strong trade & Cloudy weather heading E Mid parts the same got done boiling at 10 o'clock Lat parts more moderate heading E employed in working on Oil and painting a boat to Lat 6 miles S

Long 89 46 W

Lat out

77

of Galapagos Island

Wednesday October 27th 1856

This day Comm with fine weather but Cloudy Mid Lat parts the Same Indefatigable S.S. bearing W & W distant 15 miles employed in Coopering Oil to end

Lat 21 m S

Thursday October 30th

This day Comm with fine Trades but Cloudy weather Mid parts the Same heading E by S Lat parts moderate all hands employed in Stowing down oil in the fore hole Chatham Island 15 miles of to end

Friday October 31 th 1856

This day Comm with moderate breezes and Clear weather heading E. Mid parts the Same Lat parts Strong trades Steering N W by W Two Tower Island hoisted out & Sail be made & Gallons

Lat 02 m N

Long 89-25 W

Saturday November 1 th 1856

This day Comm with brisk Trades and Clear weather Steering W N W Mid parts heading to the E ward Lat part Steering for Abingdon Island at 5 P M went in with to boats fishing

Lat - 33 m N

Long 90 41 W

Sunday November 2 th

This day Comm with fine Trades Steering W by N Mid and Lat parts moderate weather Abingdon in Site

Lat 50 miles N

of Galapagos Islands

Monday November 3th

This day Com with light Trades and pleasant weather heading Wly & Mid & Lat partes very moderate heading E saw Wenman Island instead in washing Ship Sends Lat 1 05 N

Tuesday November 4th

This day Com with light Trade & thick weather Mid parts the same Lat parts thick & hazy at 7 A M saw a Shole of whales they preceived Sumthing & went to windward did not lose for them at 12 o'clock saw sum more to windward lowed the boats & gulled them got a new boat out So ends this day

Wednesday November 5th 1856

This day Com with pleasant Trades & Clear weather boats of in Chase of whales Mid & Lat partes fine Clear weather at daylight saw Sperm whales lowed the boats & Chased all day without Success Wenman Island bearing N 20 m

Thursday November 6th 1856

This day Com with fine weather the boats came on board Mid & Lat partes fine smooth pleasant weather heading in for North head saw to barrels of the weather beem both boiling at Sun down Seconds Rock bore N E 10 miles saw lots of Fin backs imployed in Ship duty So ends

Of Galapagos Islands

Friday November 7th 1856
This day Com with fine moderate weather
Mid & Last partes the same foggy saw
a ship & barks boiling of Lee buy employ
in mailing over an old boat So ends

Saturday November 8 th
This day Com with fine Trades but
hazy weather Mid & Last partes much the
same Stood Close in to Narborough
Lat 10. m. S

Sunday November 9 th
This day Com with light Trades & hazy
weather heading off Shore Mid & Last partes
the same Close in to Narborough
Lat 16 m S
Monday November 10 th Long 92 15 W

This day Com with light Trades & Clear
weather Mid & Last partes the same at 10 A.M.
Spoke the Catawba of Nantucket Provin
1200 Sperm 230 Whale of Lee bay So ends

Tuesday November 11 1856

This day Com with light Trades & pleasant
weather heading in for North head Mid
parte the same Last parte Calm
saw Blackfish Saw to Ship heading
Shore

of Lee Bay

Wednesday November 12th

This day Com with light Trades & Clear weather Mid & Last partes Cabin saw three Ships imployed in Coiling a Spare Line of North head Lee bay

Thursday November 13th

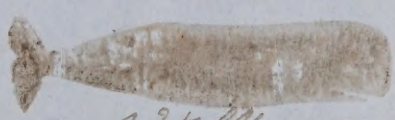
This day Com with light ~~ff~~ Trades and Clear weather Steering N E Mid & Later partes fine heading W & Steering E N E saw North head bearing E by S 25 miles

Lat 19 m N

Friday November 14th

This day Com with fine Trades & hazy weather Steering W E Mid parte the same Lat parte fine Steering N E at 2 P M saw a boat of Sperm whales going to windward at 3 o'clock lowed the boats struck and killed 2 and got them a longside at dark North head bearing S E 20 miles Lat 19 m N

L B 25 bbl



125 bbls

W B

Saturday November 15th 1856

This day Com with fine weather boats of first to whales Mid parte Laying aback with the whales along side Last parte at daylight Commenced Cutting at 7 o'clock saw more whales going quick to the East ward lowed the boats but with out success all hands imployed in Clearing up decks North head in Site

Lat 19 m N

of Galapagos Islands

Sunday November 16th
This day Com with fine weather bearing E at 5 oclock P M Com biting Mid & Lat parter very fine boiling all hands imployed in brakeing up Lamps North head bearing E N^rE 10 miles Saw 8 Ships

Monday November 17th
This day Com with fine pleasant weather Steearing E by N Mid parte Steearing N^rE by N finished boiling at 11 oclock night Lat parte imployed in boiling bone and fat been Steearing N^rE pared down by Defender Dark & double took in Sail

Tuesday November 18th
This day Com with Strong Trades and hazy weather Steearing N^rE Mid parte by the wind heading in for the land Lat parte were Ship to W

Wednesday November 19th
This day Com with Strong Trades Steearing E N^rE Mid parte moderate Lat parte Strongs Trades Saw a breach once Saw no more of it Abingdon bearing E — Lat 55 m N

Thursday November 20th
This day Com with moderate Trades and Clear weather Mid parte Steearing E Lat parte by the wind at 4 P M Saw Spezia whales 4 or 5 miles to windward did not Lore for them for it was near night Lat 1 00 N Abingdon Bearing S 25 miles Long 90 41 W

Off Gallapagos Islands

Friday November 21 th

This day Commenced with light Trades and Clear wet weather bearing E Mid parts fine at 3 o'clock turned to S W Lat Commenced breaking out in the After hold to Show down at 8 A M sprung a whaler going to windward boxed the boats Struck & killed to got them along side at 2 o'clock & Commenced Cutting got them in at at 7 o'clock Slingdon bearing S E 28 miles to the Mate & Second had some hard words of in the boats


WB 20 bbl


SB 25 bbl

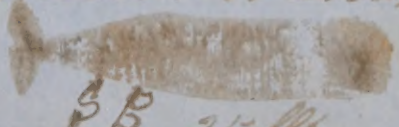
Saturday November 22 th

This day Commenced with fair Trades all hands employed in Cutting at dark got through Mid parts parts Cleaning away the heads at 3 o'clock Commenced boiling Lat parts moderate at 2 P M Saw whales bore the but they gulled them with the boats got nothing Slingdon South in Site 20 miles

Sunday November 23 th

This day Commenced with moderate Trades and cloudy weather off in Chase of whales but got nothing Mid parts & but parts fine at 10 A M finished boiling Saw breaches at 2 P M were Ship to S W at 4 Saw them Spouting Lowered the boat & gulled them but Struck and killed two got them along side at 9 night o'clock Slingdon bearing S S W 40 miles to each


LB 25 bbl


SB 25 bbl

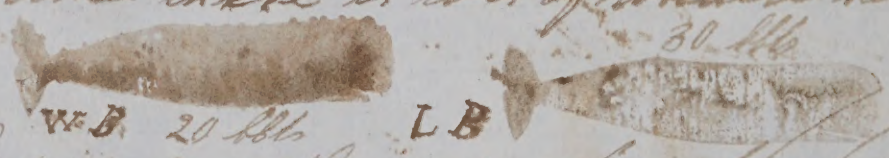
off Galapagos Islands

Monday November 24th 1856

This day Com with fine weather boats of fast to two whales got them alongside at 9 o'clock night Mid parts braced fast heading E Lost to holde on a strong tide. Setting N.W. M parts geting ready for Cutting Lat parts rigged Com Cutting got through at 11 o'clock Lat 1-27 N

Tuesday November 25th 1856

This day Com with strong Trades reefed the topsails at 3 o'clock on the 24 saw a number Com boiling heading S.W. Mid parts of the same Lat parts fine at daylight wore Ship to the Eastward at 8 o'clock P M saw a shole of Spezm whales going to the N.W. lowed the boats Struck three drawed from one one lost lanced one low one but he went of killed and got two to the at 11 o'clock A M at 1 o'clock P M Com Cutting finish at 6 o'clock boiling at the same time there is lots of whales here at present.



Wednesday November 26th 1856

This day Com with fine weather all hand imployed in Cutting and boiling on the 25th Stingood in Site Mid parts all hands imployed in boiling and Setting up Shook and other necessary duty Saw no land to day

Lat 1-35 N
Long 90 48 W

off Galapagos Islands

Thursday November 27 th

This day Com with moderate Trades but Cloudy weather heading E by N Mid & Lat parts Cloudy weather heading E all hands imployed in boiling & other duty at 2 P M ~~on the~~ Coolled down to ends 35 Casks of oil on deck

Lat 1 48 S

Friday November 28 th Long 89 58 W

This day Com with fresh Trades & Cloudy weather heading E Mid parts Strong Trades wore Ship to S W Lat parts moderate all hands imployed in Stowing down oil in the After hole Saw Abingdon

Saturday November 29 th

This day Com with moderate Trades heading S W Mid parts wore Ship to E Lat parts fine heading S W ~~with~~ all hands imployed in Stowing downing the Oil in the fore hole Abingdon bearing S S E distant 45 miles To ends this day North 19 Casks of Oil on deck and Shooks water & a number of other Casks

Lat 1 23 N

Sunday November 30 th

This day Com with fine weather heading S W Mid parts the same Lat parts Strong Trades ~~wore~~ at daylight Saw Sperme whale going to the North toed the boats but lost sight of them Came on board at 1 o'clock P M toed ~~you~~ again & Struck to drawed from one Killed the other got him a long side at 5 o'clock We moored at

bearing W N W 18 miles Bends

W B 30 bbl

off Cuttyhunk Islands

Monday December 1st 1856

This day Com with brisk Trades & hazy weather of after whale Mpartes getting ready for Cutting Lat parts moderate Cut in the whale at 2 o'clock P.M. Com biting Wennman Island bearing W.S.W. 25 miles Parents Setting up Pipe Shook & boiling

Tuesday December 2th

This day Com with moderate Trades but a hazy atmosphere Mid & Later partes the Same finished boiling 2 o'clock P.M. Saw Wennman Isl Lat 41 36 N

Wednesday December 3th

This day Com with moderate Trades and hazy weather heading E.by.S. Mid & Lat partes the Same heading E.S.E. imployed in repairing Casks & oth Ships duty Abington in Sight Lat 1-30 N.

Long 91 02 W

Thursday Decem 4th

This day Com with fine Trades & Clear weather heading S.E. Mid & Latter partes fine weather stacked Ship twice Abington bearing S.W.by.S 40 miles imployed in repairing Casks & Coopering oil Lat 1-19 N.

Friday Decem 5th Long. 90-14 W

This day Com with fine weather Mid and Lat partes the Same on different tack imployed in Stowing down oil in the fore hole Abington bearing S.S.W. 47 miles

Off Galapagos Islands

Saturday December 6th 1856

This day Corn with fine Trades but a hazy atmosphere Mid & Lat parties the same employed in Coopering 3 pipes of Oil Abingdon bearing S S E 18 miles Lat 55 mins N Long 91 08 W

Sunday December 7th

This day Corn with light Trades and fine weather heading S S W Mid & Latter parties fine on different tacks saw Finbacks & Seconds Rock bearing S S E 15 miles Lat 45 m N Long 91 35 W

Monday Decem 8th

This day Corn with moderate Trades and hazy atmosphere heading S E by E Mid parts Calm Lat parts moderate Trades Close in to the Rock tacked off Shore Spoke the Vigilant of New Bedford Mc Cleave 12 months out 250 Sperm Sounds

Tuesday December 9th 1856

This day Corn with moderate Trades and hazy weather Mid & Latter parties the same Stowed down 3 Pipes of oil in between decks saw North head saw the Catawba Sounds

Wednesday Decem 10th 1856

This day Corn with moderate Trades and hazy weather Mid parts the same Lat parts Calm 3 Ships in Sight North head bearing E N E 15 miles Spoke the Sanguinem of West Ports Horton 700 Sperm Sounds

87

Thursday November 11th

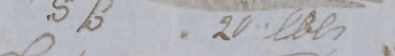
This day Com with fine Trades but hazy weather Steering N.E Mid & Lat parts by the wind & Steering N.E Saw 3 Ships at Sunrise Redondo Rock bearing E 12 miles Saw porpoises

Friday December 12th

This day Com with fine Trades but hazy weather Steering N Mid parts laying with the main Topsail aback Lat parts Steering E N.E Saw 2 Ships Redondo Rock S E 10 miles

Saturday December 13th

This day Com with light Trades & hazy weather Steering E N.E Mid parts Close to the rock Kept of N.E Lat light winds Steering E N.E at 10 A M Saw a breach hoped for it at 11 o'clock Saw them Spouting Sperm whales lowed the boats Struck & Killed fore lost to & Saved to get them along side at 6 o'clock P M Redondo Rock bearing S W 16 miles Albemarle bearing E S E 20 miles



Saturday Decem 14th 1844

This day Com with fine Trades & Clear weather Cours of whaleing got them at dark Mid parts Steering E N.E and laying aback at daylight Com Cutting at 10 o'clock got through Saw 2 Merchantmen Steering to the North Saw 1 Whaler the Rock bearing S 16 miles at 2 o'clock P M Com boiling

of Galapagos Islands

Monday Decem 15th 1856

Com with strong Trades & squally heading of shore at dark wore ship Mid parts very strong Trade heading in for the North parts of Albemarle Lat part fine boiling at 3 o'clock saw a school of Sperm whales close in to the land going to the North lowed the boats struck and killed 2 got one boat Capt Zeigler the Superintd struck & killed one of them that had the mates line got them a long side at 10 o'clock night on the 16th Sea serpent

Tuesday Decem 16th

This day Com with light weather bout of whaling Mid parts finished boiling & got ready for Cutting fat parts fine at daylight Com Com Cutting at 11 A M finished Rounded North bearing S 10 miles saw a school of to leward boiling we Com boiling at 3 o'clock

~~Tuesday~~ ~~Wednesday~~ 17th 1856

This day Com with light breezes heading off shore with the main topsail aback Mid parts the same Lat moderate spoke the Barke Henry Tailer of Newbedford Emer 17 months 900 bbls Sperm saw 4 more ships to leeward boiling

~~Thursday~~ Wednesday 18th December

This day Com with brisk Trades and hazy weather Mid parts the same finished boiling at 8 o'clock night Lat parts moderate steering N E the Rock bearing E by N 20 miles saw 6 ships employed in drawing oil and cutting the fat

Cruising of Galapagos Islands

Friday Decem 19th 1856

Com with moderate Trades & fine weather
E Steering N Ely E. Mid parts Steering E
Lat parts fine Saw 6 Ships employed in
Coopering Oil to put down in the fore peak
the Rock bearing S S W 5 miles Soends

Lat 20 miles

Saturday Decem 20th Long 96 54 W

This day Com with moderate Trades & Clear
weather Mid parts Calm & Light Lat parts
fine all hands employed in Stowing down Oil
in the fore hold the Rock bearing S W 15 mi
at 4 P M Spoke the A R Tucker of Lorbinco with
800 Sperm Soends

Sunday Decem 21st

This day Com with moderate Trades and
fine weather Mid & Later parts the Same
Saw the A R Tucker Abingdon bearing
E S E 18 miles Soends this day

Monday December 22 the

This day Com with light Trades and fine weather
Mid parts the Same Lat parts fine at daylight
Saw a ~~Croute~~ School of Sperm whales going to
N E lowed the boats Struck two Killed one
& drawed from one after being fast to him
one hour took the whale along Side
and Chased on after the whale but Could
not get on board Came on board at 3 o'clock
hoisted on & Cutt him in Abingdon

first in Site

SB

Off Galapagos Islands

Tuesday December 23th 1856

This day Com with light Trades & fine weather hoist off but Cumming on board Mid parts standing boats Crews Getting up the blubber Lat parts fine at daylight Commenced boiling at 7 o'clock wore Ship to S W at 9 saw Sperm whales going to the N E quick at 1 P M tored for them but they were so wilde that the boats Could not git on Chased till Sun down & gave up

Lat 1-46 N
Long 91-15 W

Wednesday Dec 24th

This day Com with fine weather boats off Mid parts the Same boiling Lat parts the Same Cutted down at 12 o'clock saw blackfish Spouts

Lat 1:54 N
Long 90 42 W

Thursday Decem 25th

This day Com with moderate weather heading S S E Mid parts tacked Ship to S W Lat parts moderate at 7 A M saw whales off the weather bow 3 miles off going to windward quick went out of Tote employed in Ships duty

Lat 1-36 N

Friday Decem 26th 1856

This day Com with light Trades & thick hazey weather heading W S W Mid parts moderate Lat parts thick squally weather heading on different Tacks employed in Coopering pipes of Oil to stow in between decks

Lat 1 38 N
Long 91 35 W

8

of Wennaand Island

Saturday December 27th 1856

This day Com with brisk Trades & Cloudy weather leading to the S W Mid parts the same Lat moderate heading E Wennans Isl bearing N by E 15 miles employed in stowing oil in between decks

Sunday Decem 28

This day Com with very light Trades Mid & Lat parts the same saw Blackfish Finbacks & Porpoises Wennan Isl bearing N E 15 miles

Monday December 29th

This day Com with moderate Trades & Clear weather sailing with Wennans Island in sight as Mid parts fine breeze Lat parts moderate employed in fitting the Cutting block Wennans Island bearing W 20 miles

Lat 1-20 N

Tuesday Decem 30th

This day Com with moderate Trades & Clear weather Mid parts the same Lat parts very light at 8 P M saw a Shoal of Sperm whales going to windward lowed the boats mistaken them of the Starboard boat struck & got stove & but time the whale went of came on board took in the boat to mend

Wednesday Decem 31st

This day Com with light Trades & Clear weather Mid & Lat parts light winds from the S W with hazy weather steering S E mended the Starboard boat & put her out Abingdon bearing S E 30 or 40 miles off

Lat 1-30 N

of Lyttelton Island

Thursday January 1th 1857

This day Cam with light winds from S W Steering S E Mid & Lat parts much the Same Abingdon bearing S E 48 miles

Friday January 2th

This day Cam with light airs and Clear weather Mid & Lat parts moderate heading E by S Abingdon bearing S E by E 35 miles

Lat 1 01 N

Saturday January 3th Long 91 - 16 W

This day Cam with fine Trades & Clear weather Mid & Lat parts the Same Lat part Steering N E by E Saw a Bark heading in to the East ward Saw Wemnans Island

Sunday January 4th 1857

This day Cam with light weather Steering N N W Mid & Lat parts fine on different tacks saw a Bark saw no land to east

Lat 49 N

Monday January 5th Long 91 50 W

This day Cam with winds from S by W heading S E Mid parts the Same Lat parts brisk Trades Abingdon bearing E 20 miles

Tuesday 6th of January 1857

This day Cam with Calm Mid parts light breze Lat parts much the Same imployed in Stowing down Oil in the After hole Abingdon bearing E 20 miles

of Galapagos Islands

Wednesday January 7th 1857

This day Commenced with light Trades & Cloudy weather Mid parts heading S by E at daylight Close in to Albemarle Last parts hazy Steering N W Saw a Brig Steering N

Thursday 8th Jan

This day Commenced with fine weather Steering N E Mid parts hazy, aback Last parts Steering N N E Saw finback Wenman Island bearing N E 12 miles

Friday January 9th

This day Commenced with light Trades Steering N N E Mid & Last parts rainy Cathpeper Island bearing N E 4 miles

Saturday June 10th

This day Commenced with light Trades & Cloudy weather Steering N E Mid parts the same Last parts rainy Steering E by N Cathpeper Island bearing S W 20 miles

Sunday January 11th 1857

This day Commenced with fine Trades but Cloudy weather Steering E Mid parts hazy Last parts moderate Wenman Island bearing W S W 12 miles Lat 1 37 N

Monday Jan 12th Long 91 - 30 W

This day Commenced With light Trades from E S E heading S by E Mid parts moderate Last parts Squally heading N E at 11 A M Saw a boat to windward tacked for her thought it

was a whale boat but proved to be about as a Scow with three men in her by the name of William T. Henrietta Bard Tuber & William Gray hos were left on Albemarle Island July 29th 1856 from Brig Gregorio Helena of Calao Capt Edward Gale for the purpose of obtaining Turpen and but did after they had ben there 6 months they Constructed a Kinds of boat and left for Resonnas Spell in with them 40 or 50 miles N W from Abingdon thinking they would never arrive enay where I took them on board so ends

Tuesday January 13th 1857

This day Com with Squally weather Trades variable Mid parts the same but parts fine mixed E S E heading N E Resonnas Est bearing S S W 40 miles Lat 1. 49 N

Long 91 40 W

Wednesday Janu 14th

This day Com with fine Trades & Clear weather heading N E Mid parts the Same but parts light winds with rain Squalls

Lat 2. 27 N

Long 91 50 W

Thursday Jan 15th

This day Com with Squalls from N E with rain heading S E Mid parts wind variable but fine Clear weather heading S W at 4 P M Saw Spermen Whales going to windward Lowered the boats but it Came on Squally called the boat on board took them a whale Came up close to the Ship towed to boats the Starboard boat Cum very near getting fast darted but did not hit Lat 2 27 N

at Stone Slightly Sh enck with rain Long 92. 15 W

of Cubeppies Islands

Friday January 16 th 1857

This day Com with mine Squalls but dione but had to Lanc on board on a Count of rain Mid parts Squally heading S W Lat parts moderate heading E at 2 P M Saw whales ~~to~~ of the wether been bored ~~the~~ boats got up to them whales miles to windward the whales miles of when with in a quarter of a mile but the mate wold not Stop for the other boat so they both Lance on board the mate is to blame So ends Lat 2 25 N

Long 93 01 W

Saturday Janua 17

This day Com with moderate winds and Cloudy weather 2 boats of in Chase of whales but like the day before with out Success Mid as Lat parts a good breez heading on different tacks Lat 2 12 N

Long 92 55

Sunday January 18 th

This day Com with moderate Trades heading S W by W Mid parts the Same Lat parts birth W Trade heading S W by W with a strong N W tide Lat 2 09 N

Monday Janua 19 th Long 94 18 W

This day Com with moderate Trades heading E by S Mid & Lat parts moderate heading to the East Saw Black fish ~~evas~~ Shoot on it for Water & Cant get out of this place Lat 2 05 N

Long 93 55 W

Tuesday January 20th 1857

This day Com with very light Trades & Clear weather heading E by S. Mid parts the Same Lat part a little more wind with a very heavy Swell from the N W Lat 1 48 N

Long 23 - 30 W

Wednesday Januar 21st

This day Com with moderate Trades heading E by S Mid & Lat parts very much the Same heading E S E at 4 P M Saw Wenman Island bearing E N E 28 miles Lat 1 14 N

Long 22 20 W

Thursday Januar 22 th

This day Com with moderate Trades and Clear weather heading E S E Mid parts steady E Latter parts the Same Wenman Isl bearing W N W 30 miles Saw Abingdon & Albemarle Lot the Fore Topmast Standing Sail

Lat 1 02 N

Friday Januar 23 th Long 92 15 W

This day Com with light Trades steering E 1/2 N Mid parts wind from E S E Lat parts light winds from S S E heading E very present Saw Wenman

Lat 1.32 N

Saturday Jan 24 th Long 91 15 W

This day Com with light Trades heading E. Mid & Lat parts wind very light heading E N E bound in after water and Wood but we make very slow progress the wind being very light

Lat 1 41 N

Long 91 12 W

Journal on Board Bark Helen Snow

Sunday January 25th 1857

This day Com with very light Trades and Clear weather heading E N E Mid & Lat part very much the Same Lat 2 23 N

Long 91 02 W

Monday Janu 26th

This day Com with very light Trades heading N E by E Mid & Lat parts Calm Lat 2 41 N

Long 91 05 W

Tuesday Janu 27th

This day Com with Calm weather Mid & Lat parts light winds from the S W steering E S E

Lat 2 28 N

Wednesday Jan 28th Long 90-30

This day Com with light winds from S W at 3 P M wind from West Steering E S E Let the Fore Top mast standing rait Middle & Latter parts wind variable Steering E S E

Lat 1 49 N

Thursday Jan 29 Long 89 45 W

This day Com with light winds from S W Steering E S E Mid & Lat parts winds variable with Some Squalls of rain Lat 1 24 N

Long 89-18 W

Friday Jan 30th

This day Com with squalls from the North Mid & parts wind variable with Squalls of rain

Saturday Jan 31 th 1857

This day Com with squally weather & variable winds Middle & Lat parts the same heading E most of the time Lat 1 04 N

Long 89-04 W

Bound in to Port

Tuesday February 1st 1857

This day Commenced with light airs & squalls of rain Mid parts light airs & Calm Lat parts wind from E N E heading S E a very strong Current to N W

Lat 1 13 N

Monday Febru 2d Long 49 33 W

This day Commenced with light winds from E N E heading S E Mid & Lat parts light airs and Calm imployed in mending the foresail

Lat 1 03 N

Tuesday Febru 3d Long 49 50 W

This day Commenced with Calme weather Mid parts the same Lat parts lite breezes from E S E heading N E a very strong tide sets Lat 1-43 N

Long 49 43 W

Wednesday Febru 4th

This day Commenced with very light winds from E Mid & Lat parts very light airs & Calms Coopers imployed in makeing Keggs for there allowance of water in fors we are short of water

Lat 2 16 N

Thursday Febru 5th Long 49 26 W

This day Commenced with light airs from the North Mid & Lat parts light winds from S E. Trying hard to get in Lat 2 27 N

Long 49 14 W

Friday February 6th

This day Commenced with light winds from S E heading E N E Mid parts a fine breeze from the E S E headings N E Lat parts very moderate headings N E and E N E Lat 2 51 N

I think the tide is setting Long 48 49 W

to the N E

Bound in to Port

Saturdays February 7th 1857

This day Corn with light airs and Clear hot weather heading N E Mid & Lat parts light airs from the S W & Steering E & E against a strong Current to day put all hands on alowance of water 3 quarts per day to each man Lat 3-06 N

Long 89 15 W

Sunday Febru 8th

This day Corn with light airs from S S W Steering E S E but going to the westward Middle & Lat parts wind very light & verable with thunder Lat 3 13 N

Long 89 17 W

Monday February 9th

This day Corn with light airs and verable Steering E Middle & Lat parts very much the Same Lat 3-30 N

Tuesday Febru 10 Long 89 17 W

This day Corn with very moderate weather wind from S E heading E N E Middle & Lat parts Calm & Lidight airs & verable Lat 4 01

Long 89 40

Wednesday Feb 11th

This day Corn with the wind from S E to N N E Worked Ship twice Mid & Lat parts baffling winds & Calm heading on different tacks had heavy squalls of rain Lat 3 48 N

Thursday February 12th Long 89 40 W

This day Corn with baffling winds Mid & Lat parts Calm with rainy squalls put Charles Walker in Irons for his abusive Language to me he threatned to Beat at me he is a bad old fellow to say the least of him Long 90 20

Friday February 13th 1857

This day Com with Calms & light variable winds & large swell from the N.W. Middle & last parts very much the same with from 5 fathoms of water

Lat 3-44 N.

Saturday Febru 14th

This day Com with airs from E heading S.S.E but making weston very fast there being a strong tide Mid parts a strong breez from E.S.E heading S. Lat parts the same

Lat 2.50 N

Long 92 05 W

Sunday Febru 15th

This day Com with moderate winds from E.S.E heading S Mid & Lat parts very much the same

Lat 2 07 N

Long 93.06 W

Monday Febru 16th

This day Com with light airs from E & Calms heading S.S.E Mid parts Calm Lat parts light breez E.S.E heading S. strong westerly tide

Lat 2.03 N

Long 94 04 W

Tuesday Febru 17th

This day Com with light winds from E.S.E heading S Mid parts Calm Lat parts light airs from S.S.E heading E a N.W current we are trying harde to git to the South

Lat 2.17 N

Long 94 20 W

Wednesday Febru 18th

This day Com with light airs from S.S.E Mid parts a very light air from the westward steaering S.S.E and S by E but dont make anything to the South

Lat 2.16 N.

Long 94 33 W

Trying to get in to port

Thursday February 19th 1857

This day Com with light winds from W S W Steering S by E Mid & Lat parts the same the tide has Slacked I think

Lat 1 30 N

Friday Feb 20th Long 94 39 W

This day Com with very light airs from W S W Mid & Lat parts Calm & light airs from W S W to S W wored to boats after black fish tide setting to S E

Lat 56 m N

Long 94 11 W

Saturday Febu 21st

This day Com with very light airs from the S W heading S E Mid & Lat parts the same strong tide setting to the Eastward

Lat 32 m N

Long 93 22 W

Sunday Feb 22 th

This day Com with very light winds from W S W heading S Mid & Lat parts Calm

Lat 38 m N

Long 93 38 W

Monday Feb 23 th

This day Com with moderate winds from W heading S S W Mid & Lat parts Wind S S W heading S E by S

Lat 5 m N

Long 93 - 02 W

Tuesday Febru 24 th

This day Com with light airs from S S W heading S E by S Mid & Lat parts Calm

Galapagos Orlando bearing E 30 miles

Lat 13 m S

Long 92 - 15 W

Of Valparaiso Islands

Wednesday February 25th 1857

At 6 this day Calm a strong tide setting to the East Narbourgh Isl bearing E 15 miles saw black fish tored for them got one

Lat 15 m S

Thursday Febru 26th Long 91 49 W

This day Calm with light breezes from the west W.S.W heading S Spoke the Ezekiel of New Bedford Wakeland 21 months out 300 bbls saw the Sengusean boiling South head bearing SE 30 miles

Lat 38 mi S

Long 91 53 W

Friday Febru 27th

This day Calm with light breezes from SW heading SSE Mid parts wind W N W steering SW by S Squalls of rain Lat parts Wind N W at daylight saw whales going to the East ward lowed the boats gaffed them put bum Verdigris on the ~~th~~ lews to kill the worms

Lat 1. 20 S

Long 91 46 W

Saturday Feb 28th

This day Calm with very light winds from W steering S by W Mid and Larter very much the same lowed and caught two black fish South Weard in

Lat 1 31 S

Long 92 - 10 W

Journal

Sunday March 1st 1857

This day Com with Calm weather Mid parte the same Lat parte a fine breeze from N.E Steering S.E.E Lat 2 10 S.
Long 91 49 W

Monday March 2d

This day Com with fine breezes from N.E Steering S.S.E Mid & Lat parts the same bited out the Blackfish Lat 3 27 S

Tuesday March 3d

This day Com with very light air and Calm Mid parte Calm Lat parte wind from S.E heading S.S.W with a large Swell from S.E
Lat 3 52 S
Long 91 26 W

Wednesday March 4th

This day Com with veruble winds heading E.N.E Mid parte Strong breeze from E.S.E with Sum rain heading S Lat parte heading S by W at 10 A.M turned to N.E
Lat 4 48 S

Thursday March 5th

This day Com with variable winds & Cloudy weather Mid & Lat parts Calm & light airs heading to the South Lat 5-19 S
Long 92 01 W

Friday March 6th

This day Com with light winds from E.S.E and Clear weather heading S M parte heading N.E Lat parte Strong winds from S.E with Squalls of rain heading E.N.E

Saturday March 7th 1857
This day Com with strong winds from S E with rain heading E N E Mid parts moderate winds & variable last parts strong winds from S E heading E S E

Lat 5 20 S

Sunday March 8th Long 90 35 W
This day Com with strong winds from S E heading E N E Mid & Later parts wind variable & heading on different tacks

Monday March 9th 1857
This day Com with light winds from the E S E and Cloudy weather Mid & Later parts wind variable heading on different tacks

Lat 5-20 S.

Tuesday March 10th Long 88 40 W
This day Com with light winds from the N N E heading E Mid & Last parts winds and baffling heading to the Eastward

Lat 5 40 S

Wednesday Mar 11th Long 87-59 W
This day Com with light air from S S E and Cloudy weather Mid & Last parts fine breeze heading S S E & N E Lat 5-48 S

Long 87 18 W

Thursday March 12th
This day Com with brisk breeze from E heading S S E Mid & Last parts brisk breeze heading N E

Lat 5 15 S

Long 86 29 W

Journal on board B Helen Snow

Friday March 13th 1857

This day Commenced with brisk Trade from E S E and Clear weather heading N E Mid parts tacked to S S E Lat parts wind from E heading N N E tacked to S S E

Lat 4 38 S

Saturday March 14th Long 86 14 W

This day Commenced with moderate Trades from E to E N E heading S S E & S E Mid & Lat parts light winds from E S E heading N E Spoke the Brk Catalpa of New Bedford Snow 4 months out 100 bbls Sp Lat 5 08 S

Long 85 46 W

Sunday March 15th

This day Commenced with light winds from E S E and Clear weather heading N E Mid parts Calm Lat parts light winds heading N E

Monday March 16th 1857

This day Commenced with winds from E tacked Ship to S S E Mid parts the same at 3 o'clock night tacked to N E Lat parts Strong Trades heading N E Lat 4 48 S

Long 84 54 W

Tuesday March 17th 1857

This day Commenced with brisk Trades from E S E heading N E Mid & Lat parts the same Came in to greene water

Lat 3 54 S

Long 84 08 W

Bound in to Port

Wednesday March 18th 1857

This day Came with fine Trades but hazy weather heading N E by E Strong Tide N W Mid & Last partes very light winds from S S E heading E Lat 3 43 S

Long 83 30 W

Thursday March 19th

This day Cam with light Trades from S S E heading E Mid parte Calm Last parte lite Trades heading E Lat 3 50 S

Long 82 43 W

Friday March 20th

This day Cam with light Trades and hazy atmosphes heading E Mid parte Strong Trades Last parte more moderate Steering E N E at 4 P M made Cape Blanco Lat 3 43 S

Long 81 30 W

Saturday March 21st

This ~~E~~ day Cam with moderate Trades & fine weather Steering E by N Mid parte dazing a back Lat Calm Saw too Sails

Lat 3 52

Sunday March 22th 1857

This day Cam with light wind, Steering N E Mid parte Calm Last parte lighte airs from the North at dark Turned into heaving N E by E 10 miles Lat 3 41

~~at midnight~~

Monday March 23th 1857

This day Cam with moderate Trades running down along the land Mid parte light winds and Calm ~~at~~ 10 o clock anchored of the old fort Last parte at 10 A M took our anchor came down to the river & got of a raft of water

04

Journal on board Brk Helen Snow
&

Tuesday March 24th 1857
Laying at anchor at Tumber for wood &
Water and other Recruits Discharged the mate and
7 men & Put 2 of them that I picked up on Shore
Marla 25th 26th 27th 28th 29th

Monday March 30th 1857
This day Com with fine weather
Laying at ~~anch~~ Anchor all ready for Sea
the Duel Gills Sailed to day at 6 P M
got underway Mid parts heading
W S W Lat parts tucked to the North
Lat 3 14 S

Tuesday March 31st 1857
This day Com with light winds from the
W S W heading S Mid parts Calm
Lat parts fine freez heading S employed in
Ship duty Lat 3 34 S

Wednesday April 1st 1857
This day Com with fine breezes from S W
heading S S E land 10 miles of Mad Lat par
strong Trades heading on different tacks employ
in washing Ship working up to Paita

Left New Bedford Mass for Boston Mass to join Bark Swallow. Capt. Bob Cleveland for voyage 1 to 2 years in Indian Ocean. Desolation Island 950 miles of coast of South Africa for seal elephants and sperm whales. Bark Swallow large ship square rigged fore & main. Sailed from Wharf 3 o'clock Wed. A.M. March. 1896. Was 16 years old. Awfull sick. Half crew drunk. Capt. wanted me for Cabin boy I refused. Outside we ran in to an awfull storm. Everything furled and sick taking water. Next day sea smoother and going done. Set to work learning ropes. wheel. furling etc. Log watch between 4 & 6 P.M. after all hands get through washing down. Put in after 3 weeks runs to Cape de Verde Islands. Shipped 12 bravas almost naked Had to learn them. 1st Mate and I had fight on deck. Capt. put me in irons on roof 2 hours. I was in Starboard Watch. 3 more weeks of bad weather bad grub and bad treatment dropped anchor in harbor Desolation island.

6

M

⊙ S Correct altitude	49 - 12	
Latitude	1 - 44 N	
Polar distance	66 - 58	
Sum	117 - 54	
half Sum	58 - 57	
Altitude	49 - 12	
Remainder	9 - 45	

	23 00 08	
	1 51	
	23 01 59	
	90 00 00	
P. Dis	66 - 58	01

00020
03608
9-71247
9-22878

1 5 | 97763

9-48881

☉ S ☉ altitude 47.49 App declination

Latitude 00.02, S 21.44.03 N

3 16 add

Polar distance 111.47 21.47.19

Sum 159 38 90

½ Sum 79 49 111.47.19

Remainder 47 49

32 00

Logarithms

Secant of Lat 00000

Secant of Pol. dis 03217

Cosine of half Sum 24748

Sine of Remainder 72421

100386

50193

Apparent time of Observation

2.28.09

Equation of time 2.50

2.25.19

Chronometer time 8.31.46

Longitude in by Chro 6.06.27

60

36 6

91 36 03

30

6 - 06 - 27

60

36 - 6

91 -

Thee Bark Hetem Snow Thus Seen
Whatre

from October 18th to
Sea Whales This Season

Manifest
Hums pmt
Bbes 50 Mus